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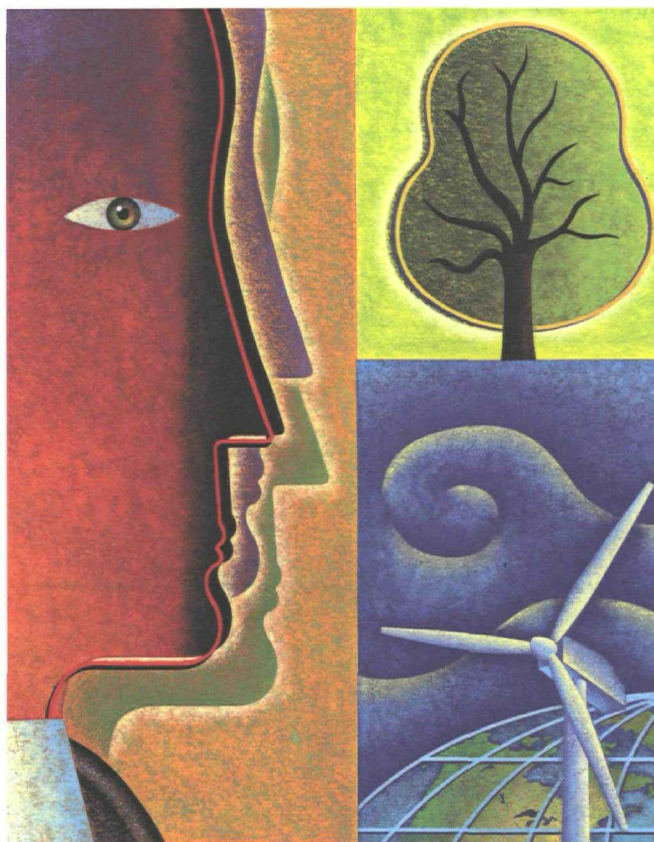
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O&M Progress Report No. 18

July 2007 – June 2008 Reporting Period

**Lemberger Landfill and Lemberger Transport and Recycling Site
Town of Franklin, Wisconsin**

January 2009





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Town of Franklin, Wisconsin*

January 2009

*Prepared for
Lemberger Site Remediation Group*

James E. Wedekind, P.G.
Senior Hydrogeologist

Kristopher D. Krause, P.E.
Senior Project Manager

RMT, Inc. | Lemberger Site Remediation Group
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Attachment 1	Computer Disk With All Historical Monitoring Data for Appendices A Through D
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Section 1

Introduction

RMT, Inc. (RMT), has been retained by the Lemberger Site Remediation Group (LSRG) to operate and maintain the environmental remediation facilities at the Lemberger Landfill, Inc. (LL), and the Lemberger Transport & Recycling, Inc. (LTR), Superfund Sites in Whitelaw, Town of Franklin, Wisconsin. In February 1997, final (revised) Operation and Maintenance (O&M) Plans were submitted by RMT for the LL Remedial Design/Remedial Action (Operable Unit 1) and the LTR Site (Operable Unit 2). An O&M Plan Addendum was also included in O&M Progress Report No. 7 submitted in September 2000, pertaining to the preventive maintenance program for the leachate withdrawal wells. This O&M Progress Report No. 18 is intended to fulfill part of the reporting requirements specified in those plans. It is supplemented by other submittals associated with the operating period addressed in this Progress Report (July 2007 through June 2008).

As outlined in Subsection 5.3 of the April 2006 Workplan for Monitored Natural Attenuation Engineering Demonstration Project (MNA Workplan), groundwater monitoring data are omitted from this Progress Report. Groundwater sampling for the MNA demonstration project began in July 2006. Please refer to the Monitored Natural Attenuation Engineering Demonstration Project - Summary Report No. 3 submitted on December 23, 2008, for a discussion of the current status of the groundwater plume. Figures showing the groundwater flow directions and the extent of the plume of dissolved 1,1,1-trichloroethane and trichloroethene are contained in that Report.

In Progress Report No. 16, dated November 2006, the LSRG proposed, and the USEPA agreed, that recommendations would be made in Progress Report No. 17 regarding future actions to be taken to address the leachate/groundwater head levels at the LL. On October 23, 2007, RMT, on behalf the LSRG, submitted to the USEPA the Leachate Head Evaluation Report for the Lemberger Landfill (RMT, Inc., 2007). The leachate head elevation included hydrographs showing the leachate/groundwater head levels at leachate head/extraction wells and an evaluation of the hydrodynamics of leachate head and groundwater. The hydrographs and a written assessment of leachate head levels for the period ending June 2007 were not duplicated in Progress Report No. 17. Updated hydrographs for the current reporting period (ending June 2008) are included in this Progress Report (No. 18), but a written evaluation of leachate levels is not included. A discussion of leachate levels among the LSRG, RMT, the WDNR, and the USEPA at a site meeting in July 2008 resulted in the development of a mutually-agreeable

decision to develop a workplan for a leachate/groundwater head level pilot study. The updated discussion of leachate/groundwater levels at the LL is contained in that workplan (RMT, 2008).

The LL workplan (RMT, 2008) responds to recommendations made in the October 2007 Leachate Head Level Report, and outlines a 1-year demonstration project in which the leachate extraction system at the LL will be turned off, samples of leachate/groundwater will be collected from the leachate head wells, and head levels in the leachate head wells will be monitored frequently. The purpose of the project is to evaluate the response of leachate/groundwater head levels without operation of the leachate extraction system. The workplan was implemented beginning in December 2008. At the conclusion of the 1-year demonstration project, a report will be submitted that will provide additional leachate/groundwater level information and analytical results.

Section 2

Activity This Period

This section describes the primary technical and administrative activities conducted on the project during this reporting period.

2.1 Site Work

The following routine operational tasks were completed during this period:

- Leachate was routinely removed from the three collection tanks and hauled off-site for treatment.
- Routine quarterly and annual leachate and landfill gas sampling was performed, in accordance with approved workplans.
- Sampling of groundwater monitoring wells and residential wells was performed according to the schedule of sampling proposed in the MNA Workplan.

The following maintenance tasks were completed during this period:

- Grass was mowed at the LL and the LTR sites, as necessary.
- The pumps in the leachate withdrawal wells at the LL were pulled, inspected, and cleaned in September 2007, November 2007, and May 2008.
- New pump heads were installed (electric motors were reused) at leachate withdrawal wells on the following dates: July 16, 2007 (LW-5); September 21, 2007 (LW-4, LW-6 and LW-7); November 9, 2007 (LW-4, LW-5, LW-6, LW-7 and LW-8); March 16, 2008 (LW-6); and May 15, 2008 (LW-4, LW-5, LW-6, LW-7 and LW-8).
- In accordance with the USEPA-approved MNA Workplan, the pump-and-treat system was operated for a brief time on a quarterly schedule. On August 17, 2007; November 12, 2007; February 28, 2008; and May 30, 2008, the air stripper blowers and extraction wells were turned on. Approximately 15,000 gallons of groundwater were pumped from the extraction wells on each of the above-listed dates, and an effluent sample was collected prior to turning the system back off.

2.2 Monitoring Program Modifications

As described above, the groundwater pump-and-treat system was turned off on August 1, 2006, to initiate the MNA demonstration project. A round of baseline groundwater sampling was performed for the MNA demonstration project in July 2006. Groundwater from the individual extraction wells was last sampled during the baseline event in July 2006, and groundwater

effluent from the pump-and-treat system is now collected quarterly during scheduled maintenance rather than on the previously-approved monthly schedule. Groundwater influent to the pump-and-treat system was last sampled on June 9, 2006.

2.3 Sampling Events

The sampling events performed during this reporting period are summarized in Table 1. The schedule of groundwater and residential well sampling followed the schedule in the USEPA-approved MNA Workplan.

2.4 Deliverables, Correspondence, and Meetings

The major deliverables and correspondence that occurred during this period are listed chronologically below.

July 24, 2007	RMT sent the Monitored Natural Attenuation Status Report No. 1 to Mr. Darryl Owens (USEPA).
August 15, 2007	RMT sent a Transmittal of Data - Residential, Plume Monitoring and Background Wells, First Quarter 2007 to Mr. Darryl Owens (USEPA).
August 24, 2007	Mr. Kristopher Krause (RMT) informed the LSRG that Ms. Annette Weissbach (WDNR) had verbally approved a change in the residential well sampling protocol to prevent false-positive detections of chloromethane. Residential well samples collected in the future will be contained in unpreserved vials and laboratory-extracted within 7 days holding time.
August 29, 2007	RMT sent a Transmittal of Data - Residential Wells, Second Quarter 2007 to Mr. Darryl Owens (USEPA).
October 23, 2007	RMT sent the Leachate Head Evaluation Report for the Lemberger Landfill to Mr. Darryl Owens (USEPA).
January 24, 2008	RMT sent the Monitored Natural Attenuation Status Report No. 2 to Mr. Darryl Owens (USEPA).
January 24, 2008	RMT sent the O&M Progress Report No. 17 - Lemberger Landfill Sites to Mr. Darryl Owens (USEPA).

January 30, 2008	RMT sent a Transmittal of Data - Residential, Plume Monitoring and Background Wells, Second Quarter 2007 to Mr. Darryl Owens (USEPA).
March 10, 2008	Mr. Edward Baroun, 5925 Hempton Lake Road, denied RMT access to his residence/private water supply well (GR-25) for the purposes of collecting a sample.
March 28, 2008	RMT sent a Transmittal of Data - Residential, Plume Monitoring and Background Wells, Third Quarter 2007 to Mr. Darryl Owens (USEPA).
April 9, 2008	The LSRG is informed from Mr. Darryl Owens (USEPA) that he will no longer be the project manager and that Richard Boice will be the new project manager.
April 18, 2008	RMT sent a Transmittal of Data - Residential Wells, Fourth Quarter 2007 to Mr. Richard Boice (USEPA).
May 16, 2008	Ms. Annette Weissbach (WDNR) informed Mr. Kristopher Krause (RMT) and the LSRG (Mr. Doug Clark) via e-mail of a June 4, 2007, public informational meeting at which the public could discuss with the WDNR's Waste and Materials Management program the request from Waste Management, Inc., to dispose PCB-contaminated sediment generated from the Fox River at the Ridgeview Recycling and Disposal Facility.
May 19, 2008	RMT sent a Transmittal of Data - Residential, Plume Monitoring and Background Wells, Fourth Quarter 2007 to Mr. Richard Boice (USEPA).
June 5, 2008	Mr. Richard Boice (USEPA) provided, via e-mail to Mr. Kristopher Krause (RMT), his comments in response to the December 2007 Supplemental Workplan for Deep Monitoring Well Installation, and he forwarded Dr. Luanne Vanderpool's (USEPA) response comments on the above report as well as her comments on MNA Status Reports No. 1 and No. 2.

June 11, 2008 Ms. Annette Weissbach (WDNR) confirmed with Mr. Kristopher Krause (RMT) an on-site meeting on July 23, 2008. The participants would include representatives of the WDNR, the EPA, LSRG, and RMT.

June 17, 2008 Ms. Annette Weissbach (WDNR) sent a letter to Mr. Richard Boice (USEPA) regarding her response comments on the December 2007 Supplemental Workplan for Deep Monitoring Well Installation.

2.5 Contacts with Local Community

Contacts with the local community occurred during the regular sampling of private wells (by RMT), and by means of the transmittals of the laboratory results to the well owners by the WDNR. Mark Brooks of RMT also continued to participate in the Friends of the Branch River Watershed organization.

In March 2006, the USEPA sent letters to all residential well owners whose wells are sampled as part of the groundwater monitoring program for the site, informing them of the upcoming monitored natural attenuation engineering demonstration project at the site.

2.6 Unresolved Delays or Areas of Concern

Several maintenance and repair tasks were necessary during this period, but no delays or areas of concern remain unresolved.

2.7 Personnel Changes

No personnel changes have occurred during this reporting period.

Section 3

Leachate and Landfill Gas Collection Systems

Appendix A of this Progress Report contains a tabular summary of the leachate head levels for the reporting period. Refer to the Leachate Head Evaluation Report for the Lemberger Landfill (RMT, Inc., 2007) for an extensive assessment of leachate head levels. A 1-year water level head demonstration project was implemented at the LL beginning in December 2008. The purpose of the project is to evaluate the response of the leachate/groundwater head levels without operation of the leachate extraction system.

3.1 Volume of Leachate/Groundwater Removed

A plot of the volume of leachate/groundwater removed from beneath the Lemberger Landfill from initial system startup (March 1997) through June 2008 is shown on Figure 1. The volume of leachate/groundwater removed from July 2007 through June 2008 was 605,540 gallons. This compares to a total of 584,300 gallons that were removed during the previous reporting period (July 2006 through June 2007). The total volume removed from startup through June 2008 was 7,842,982 gallons.

The recorded volume of leachate/groundwater removed from the LL is based on the number of truckloads hauled per month, rather than on a daily flow totalizer for the leachate withdrawal (LW) wells. This type of measurement results in the short-term fluctuations in the data plotted on Figure 1. The existing LW wells have been nearly 100 percent operational since May 2000 through the current reporting period.

During the 1-year demonstration project, leachate/groundwater levels will be monitored every 2 weeks following shutdown of the leachate extraction. Prior to shutdown, samples of leachate/groundwater will be collected from each of the leachate head ("LH") wells for laboratory analysis of VOCs.

3.2 Leachate/Groundwater Quality

Appendix B contains a tabular summary of constituents (field parameters, metals and VOCs) that have been detected in samples of the composite leachate/groundwater (leachate influent). The results are typical of landfill leachate. CVOC breakdown products (cis-1,2-dichloroethane [cis-1,2-DCE]; vinyl chloride, 1,1-dichloroethane [1,1-DCA]; and chloroethane) have also been detected in the leachate/groundwater influent samples. Table 1 shows the leachate sampling dates for this reporting period.

Trichloroethane (TCE) and CVOC breakdown compounds have also been detected in samples of leachate/groundwater that are collected from the shallow monitoring wells. Table 2 lists the VOCs that were detected during the reporting period at concentrations greater than ch. NR 140 Preventive Action Limits at the shallow wells.

3.3 Operating Status of LW Well Pumps

During the current reporting period, the system of eight leachate withdrawal (LW) wells was operational nearly 100 percent of the time. The nonfunctional downtime of the individual LW wells during this period was intentional, resulting from scheduled maintenance and cleaning of the LW pumps, and was limited to only a few hours for each well that was serviced.

3.4 Landfill Gas

This subsection includes an evaluation of landfill gas monitoring results at the LTR for the current reporting period. Gas monitoring at the LL has been completed, per the approved O&M Plan.

3.4.1 Monitoring Data

Monitoring of the landfill gas management system for the LTR, including gas vents and probes, was performed on November 14, 2007. Gas monitoring was conducted for methane, oxygen, non-methane volatile organic compounds (NMVOCs), and gas velocity. The gas monitoring data sheets for the reporting period are provided in Appendix C. Gas monitoring results at the LTR for this reporting period showed no detections of NMVOCs or methane in the gas vents and probes.

3.4.2 Gas Migration Assessment

Off-site landfill gas migration does not appear to be occurring at the LTR, based on the monitoring of gas probes and vents around the site. The absence of methane detected within the landfill limits indicates that landfill gas is not being produced, or that it is being produced in extremely small quantities. No pressure buildup within the landfill is occurring, indicating that the gas venting system is working as designed. Additionally, the risk to human health and welfare associated with gas migration remains minimal.

No other actions are warranted at this time, based on the above assessment of the extent and significance of gas migration.

Section 4

References

- RMT, Inc. 1997. Final operation and maintenance plan, Lemberger Landfill RD/RA Operable Unit 1, and final operation and maintenance plan, Lemberger Transport and Recycling site, Operable Unit 2. Prepared by Malcolm Pirnie, with modifications by RMT. February 1997.
- RMT, Inc. 2004. Assessment of remedial action effectiveness, Lemberger Landfill and Lemberger Transport and Recycling Sites, Town of Franklin, Wisconsin. RMT. June 2004.
- RMT, Inc. 2007. Leachate head evaluation report for the Lemberger Landfill. October 2007.
- RMT, Inc. 2008. Workplan for Lemberger Landfill water level head demonstration project, Lemberger Landfill site, Town of Franklin, Wisconsin. October 2008.
- USEPA. 1990. Record of decision; Operable Unit 1; Lemberger Landfill, Inc.; Lemberger Transport & Recycling, Inc.; Manitowoc County, Wisconsin. United States Environmental Protection Agency. September 1990.



Table 1
Summary of Sampling Events Performed From August 2007 Through July 2008
Lemberger Landfill and Lemberger Transport and Recycling Site
Town of Franklin, Wisconsin

	2007					2008						
	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY
Monitoring wells - Well Group IA and 1B			X		X				X			X
Monitoring wells - Well Group IIA ⁽¹⁾			X						X			
Monitoring wells - Well Group IIB			X		X				X			X
Monitoring wells - Well Group IIIA ⁽²⁾												X
Monitoring wells - Well Group IIIB			X		X				X			X
Monitoring wells - Well Group IV												X
Monitoring well - metals background ⁽³⁾												
Groundwater extraction wells												
Residential wells - Group I		X			X			X				X
Residential wells - Group II		X						X				
Treatment system influent												
Treatment system effluent	X			X			X			X		
Leachate (one sample per quarter)				X			X			X		
Leachate (annually) ⁽⁴⁾	X											
Landfill gas - LTR Landfill				X								
Treated effluent ;Branch River (annual toxicity) ⁽⁵⁾												

Notes:

- ⁽¹⁾ A subset of the Group IIA wells is sampled quarterly for VOCs and metals.
⁽²⁾ A subset of the Group IIIA wells is sampled quarterly for VOCs and metals.
⁽³⁾ Background metals well RM-009D abandoned during summer 2005.
⁽⁴⁾ Annual leachate sampling was performed just outside the reporting period, on June 9, 2006, and on August 17, 2007.
⁽⁵⁾ Branch River sampling (annual toxicity) was performed most recently in October 2005.

Prepared by: C. Shaw, 12/3/2008
Checked by: T. Clausen, 12/5/08

Table 2
VOC Standards Exceedences in Shallow Monitoring Wells
From August 2007 Through July 2008
Lemberger Landfill and Lemberger Transport and Recycling Site
Town of Franklin, Wisconsin

MONITORING WELL	VOC	CONCENTRATION (µg/L)	SAMPLE DATE
RM-5S	TCE	2.6	October 2007
	TCE	1.3	December 2007
	TCE	1.3	April 2008
	TCE	2.2	July 2008
RM-7S	Vinyl chloride	0.47	August 2007
RM-103S	cis-1,2-DCE	9.8	October 2007
	cis-1,2-DCE	11	December 2007
	cis-1,2-DCE	9.9	April 2008
	TCE	1.4	October 2007
	TCE	1.2	December 2007
	TCE	1.2	April 2008
	TCE	0.88	July 2008
	Vinyl chloride	2.8	October 2007
	Vinyl chloride	2.5	December 2007
	Vinyl chloride	2.0	April 2008
RM-207S	Benzene	1.3	October 2007
	Benzene	0.82	December 2007
	Benzene	0.94	July 2008
RM-208S	Benzene	0.85	July 2008

Note:
Fourteen shallow monitoring wells in the perched groundwater system are sampled. Only those with VOC exceedences are presented here.



Volume of Leachate/Groundwater Removed per Month Since Startup

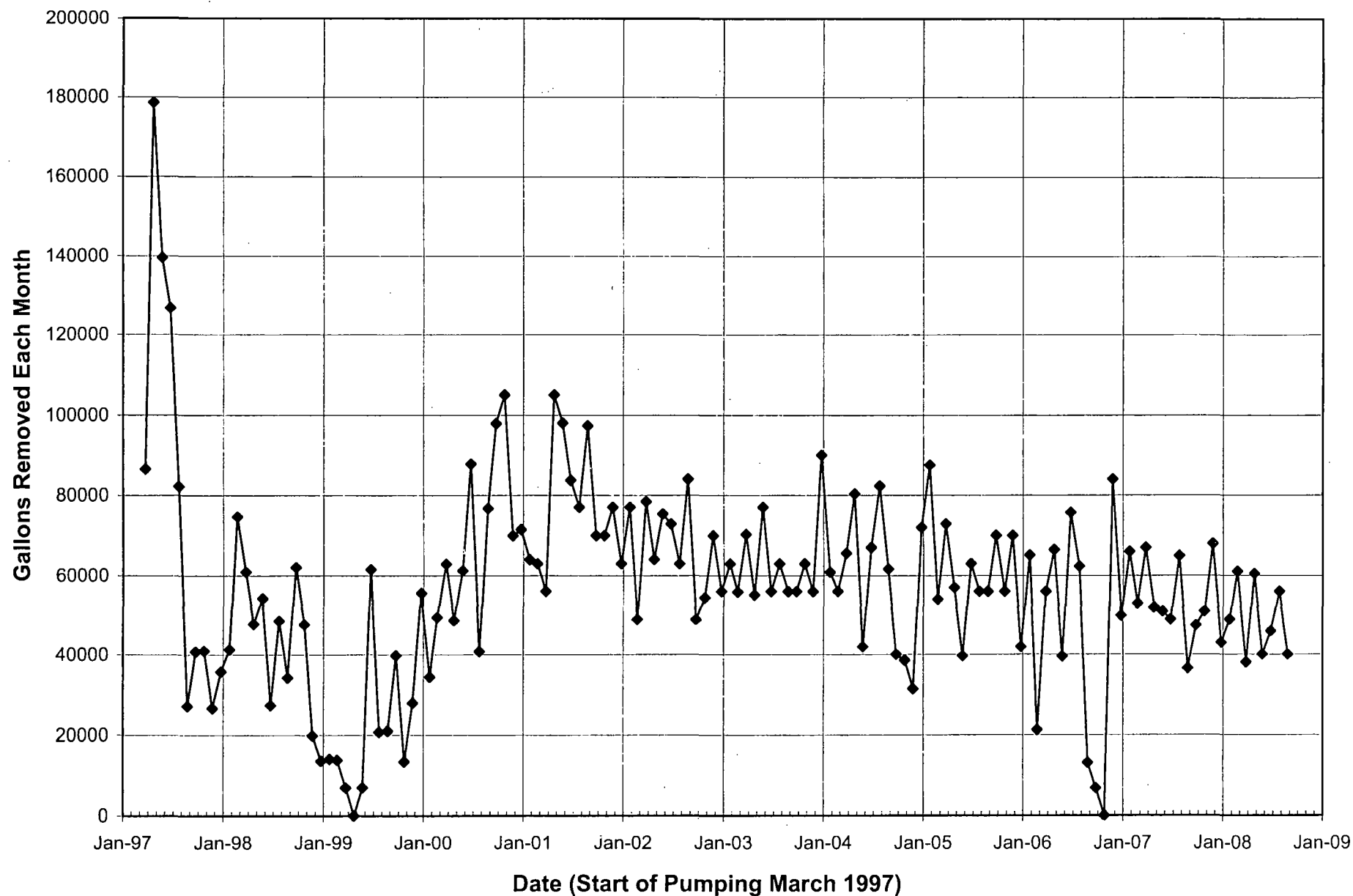


Figure 1

Appendix A
Tabular Summary of
Leachate Head Levels -
July 2007 Through June 2008

Lemberger Landfill
Leachate Head Levels (July 2007 - June 2008)

WELL ID	DATE	LEACHATE HEAD ELEVATION (feet, above M.S.L.)	BOTTOM OF WASTE ELEVATION (feet, above M.S.L.) ⁽¹⁾	FEET ABOVE (OR BELOW) BOTTOM OF WASTE ⁽²⁾
LH-01	18-Jul-07	831.36	839	-7.64
LH-01	7-Aug-07	831.30	839	-7.70
LH-01	13-Sep-07	831.25	839	-7.75
LH-01	3-Oct-07	831.22	839	-7.78
LH-01	9-Nov-07	831.14	839	-7.86
LH-01	18-Dec-07	831.06	839	-7.94
LH-01	28-Jan-08	830.96	839	-8.04
LH-01	20-Feb-08	830.84	839	-8.16
LH-01	11-Mar-08	830.76	839	-8.24
LH-01	28-Apr-08	830.83	839	-8.17
LH-01	21-May-08	830.66	839	-8.34
LH-01	12-Jun-08	830.64	839	-8.36
LH-02B	18-Jul-07	831.57	835	-3.43
LH-02B	7-Aug-07	831.50	835	-3.50
LH-02B	13-Sep-07	831.46	835	-3.54
LH-02B	3-Oct-07	831.44	835	-3.56
LH-02B	9-Nov-07	831.36	835	-3.64
LH-02B	18-Dec-07	831.27	835	-3.73
LH-02B	28-Jan-08	831.2	835	-3.80
LH-02B	20-Feb-08	831.13	835	-3.87
LH-02B	11-Mar-08	831.05	835	-3.95
LH-02B	28-Apr-08	831.11	835	-3.89
LH-02B	21-May-08	831.1	835	-3.90
LH-02B	12-Jun-08	831.08	835	-3.92
LH-03	18-Jul-07	831.77	840	-8.23
LH-03	7-Aug-07	831.70	840	-8.30
LH-03	13-Sep-07	831.67	840	-8.33
LH-03	3-Oct-07	831.65	840	-8.35
LH-03	18-Dec-07	831.54	840	-8.46
LH-03	28-Jan-08	831.47	840	-8.53
LH-03	20-Feb-08	831.43	840	-8.57
LH-03	11-Mar-08	831.39	840	-8.61
LH-03	28-Apr-08	831.33	840	-8.67
LH-03	21-May-08	831.29	840	-8.71
LH-03	12-Jun-08	831.23	840	-8.77
LH-04	18-Jul-07	829.98	847	-17.02
LH-04	7-Aug-07	829.98	847	-17.02
LH-04	13-Sep-07	829.98	847	-17.02
LH-04	3-Oct-07	829.98	847	-17.02
LH-04	9-Nov-07	829.98	847	-17.02
LH-04	18-Dec-07	829.98	847	-17.02
LH-04	28-Jan-08	829.98	847	-17.02
LH-04	20-Feb-08	829.98	847	-17.02
LH-04	11-Mar-08	829.98	847	-17.02
LH-04	28-Apr-08	829.98	847	-17.02
LH-04	21-May-08	829.98	847	-17.02
LH-04	12-Jun-08	829.98	847	-17.02

Lemberger Landfill
Leachate Head Levels (July 2007 - June 2008)

WELL ID	DATE	LEACHATE HEAD ELEVATION (feet, above M.S.L.)	BOTTOM OF WASTE ELEVATION (feet, above M.S.L.) ⁽¹⁾	FEET ABOVE (OR BELOW) BOTTOM OF WASTE ⁽²⁾
LH-05	18-Jul-07	834.03	841	-6.97
LH-05	7-Aug-07	834.03	841	-6.97
LH-05	13-Sep-07	834.03	841	-6.97
LH-05	3-Oct-07	834.03	841	-6.97
LH-05	9-Nov-07	834.03	841	-6.97
LH-05	18-Dec-07	834.03	841	-6.97
LH-05	28-Jan-08	834.03	841	-6.97
LH-05	20-Feb-08	834.03	841	-6.97
LH-05	11-Mar-08	834.03	841	-6.97
LH-05	28-Apr-08	834.03	841	-6.97
LH-05	21-May-08	834.03	841	-6.97
LH-05	12-Jun-08	834.03	841	-6.97
LH-06	18-Jul-07	846.51	852	-5.49
LH-06	7-Aug-07	846.36	852	-5.64
LH-06	13-Sep-07	846.24	852	-5.76
LH-06	3-Oct-07	846.24	852	-5.76
LH-06	9-Nov-07	846.24	852	-5.76
LH-06	18-Dec-07	846.24	852	-5.76
LH-06	28-Jan-08	846.24	852	-5.76
LH-06	20-Feb-08	846.24	852	-5.76
LH-06	11-Mar-08	846.24	852	-5.76
LH-06	28-Apr-08	849.97	852	-2.03
LH-06	21-May-08	849.89	852	-2.11
LH-06	12-Jun-08	848.91	852	-3.09
LH-07	18-Jul-07	844.63	849	-4.37
LH-07	7-Aug-07	844.63	849	-4.37
LH-07	13-Sep-07	844.63	849	-4.37
LH-07	3-Oct-07	844.63	849	-4.37
LH-07	9-Nov-07	844.63	849	-4.37
LH-07	18-Dec-07	844.63	849	-4.37
LH-07	28-Jan-08	844.63	849	-4.37
LH-07	20-Feb-08	844.63	849	-4.37
LH-07	11-Mar-08	844.63	849	-4.37
LH-07	28-Apr-08	846.85	849	-2.15
LH-07	21-May-08	846.79	849	-2.21
LH-07	12-Jun-08	846.4	849	-2.60
LW-01	18-Jul-07	842.18	NA ⁽³⁾	NA ⁽³⁾
LW-01	7-Aug-07	842.46	NA ⁽³⁾	NA ⁽³⁾
LW-01	13-Sep-07	842.41	NA ⁽³⁾	NA ⁽³⁾
LW-01	3-Oct-07	842.87	NA ⁽³⁾	NA ⁽³⁾
LW-01	9-Nov-07	842.78	NA ⁽³⁾	NA ⁽³⁾
LW-01	18-Dec-07	842.25	NA ⁽³⁾	NA ⁽³⁾
LW-01	28-Jan-08	842.38	NA ⁽³⁾	NA ⁽³⁾
LW-01	20-Feb-08	842.55	NA ⁽³⁾	NA ⁽³⁾
LW-01	11-Mar-08	842.36	NA ⁽³⁾	NA ⁽³⁾
LW-01	28-Apr-08	842.47	NA ⁽³⁾	NA ⁽³⁾
LW-01	21-May-08	842.55	NA ⁽³⁾	NA ⁽³⁾
LW-01	12-Jun-08	842.5	NA ⁽³⁾	NA ⁽³⁾

Lemberger Landfill
Leachate Head Levels (July 2007 - June 2008)

WELL ID	DATE	LEACHATE HEAD ELEVATION (feet, above M.S.L.)	BOTTOM OF WASTE ELEVATION (feet, above M.S.L.) ⁽¹⁾	FEET ABOVE (OR BELOW) BOTTOM OF WASTE ⁽²⁾
LW-02	18-Jul-07	830.91	NA ⁽³⁾	NA ⁽³⁾
LW-02	7-Aug-07	830.63	NA ⁽³⁾	NA ⁽³⁾
LW-02	13-Sep-07	830.75	NA ⁽³⁾	NA ⁽³⁾
LW-02	3-Oct-07	830.87	NA ⁽³⁾	NA ⁽³⁾
LW-02	9-Nov-07	831.08	NA ⁽³⁾	NA ⁽³⁾
LW-02	18-Dec-07	830.74	NA ⁽³⁾	NA ⁽³⁾
LW-02	28-Jan-08	830.71	NA ⁽³⁾	NA ⁽³⁾
LW-02	20-Feb-08	830.52	NA ⁽³⁾	NA ⁽³⁾
LW-02	11-Mar-08	830.85	NA ⁽³⁾	NA ⁽³⁾
LW-02	28-Apr-08	831.01	NA ⁽³⁾	NA ⁽³⁾
LW-02	21-May-08	830.77	NA ⁽³⁾	NA ⁽³⁾
LW-02	12-Jun-08	831	NA ⁽³⁾	NA ⁽³⁾
LW-03	18-Jul-07	826.81	NA ⁽³⁾	NA ⁽³⁾
LW-03	7-Aug-07	826.84	NA ⁽³⁾	NA ⁽³⁾
LW-03	13-Sep-07	826.83	NA ⁽³⁾	NA ⁽³⁾
LW-03	3-Oct-07	826.80	NA ⁽³⁾	NA ⁽³⁾
LW-03	9-Nov-07	826.92	NA ⁽³⁾	NA ⁽³⁾
LW-03	18-Dec-07	826.84	NA ⁽³⁾	NA ⁽³⁾
LW-03	28-Jan-08	826.86	NA ⁽³⁾	NA ⁽³⁾
LW-03	20-Feb-08	826.8	NA ⁽³⁾	NA ⁽³⁾
LW-03	11-Mar-08	826.88	NA ⁽³⁾	NA ⁽³⁾
LW-03	28-Apr-08	827.06	NA ⁽³⁾	NA ⁽³⁾
LW-03	21-May-08	826.84	NA ⁽³⁾	NA ⁽³⁾
LW-03	12-Jun-08	826.63	NA ⁽³⁾	NA ⁽³⁾
LW-04	18-Jul-07	820.82	NA ⁽³⁾	NA ⁽³⁾
LW-04	7-Aug-07	820.84	NA ⁽³⁾	NA ⁽³⁾
LW-04	13-Sep-07	820.80	NA ⁽³⁾	NA ⁽³⁾
LW-04	3-Oct-07	820.96	NA ⁽³⁾	NA ⁽³⁾
LW-04	9-Nov-07	821.41	NA ⁽³⁾	NA ⁽³⁾
LW-04	18-Dec-07	820.76	NA ⁽³⁾	NA ⁽³⁾
LW-04	28-Jan-08	820.65	NA ⁽³⁾	NA ⁽³⁾
LW-04	20-Feb-08	821.11	NA ⁽³⁾	NA ⁽³⁾
LW-04	11-Mar-08	821.11	NA ⁽³⁾	NA ⁽³⁾
LW-04	28-Apr-08	820.53	NA ⁽³⁾	NA ⁽³⁾
LW-04	21-May-08	821.18	NA ⁽³⁾	NA ⁽³⁾
LW-04	12-Jun-08	821.19	NA ⁽³⁾	NA ⁽³⁾
LW-05	18-Jul-07	821.96	NA ⁽³⁾	NA ⁽³⁾
LW-05	7-Aug-07	822.55	NA ⁽³⁾	NA ⁽³⁾
LW-05	13-Sep-07	822.35	NA ⁽³⁾	NA ⁽³⁾
LW-05	3-Oct-07	822.37	NA ⁽³⁾	NA ⁽³⁾
LW-05	9-Nov-07	822.59	NA ⁽³⁾	NA ⁽³⁾
LW-05	18-Dec-07	821.99	NA ⁽³⁾	NA ⁽³⁾
LW-05	28-Jan-08	821.98	NA ⁽³⁾	NA ⁽³⁾
LW-05	20-Feb-08	821.82	NA ⁽³⁾	NA ⁽³⁾
LW-05	11-Mar-08	822.53	NA ⁽³⁾	NA ⁽³⁾
LW-05	28-Apr-08	822.71	NA ⁽³⁾	NA ⁽³⁾
LW-05	21-May-08	822.75	NA ⁽³⁾	NA ⁽³⁾
LW-05	12-Jun-08	822.35	NA ⁽³⁾	NA ⁽³⁾

Lemberger Landfill
Leachate Head Levels (July 2007 - June 2008)

WELL ID	DATE	LEACHATE HEAD ELEVATION (feet, above M.S.L.)	BOTTOM OF WASTE ELEVATION (feet, above M.S.L.) ⁽¹⁾	FEET ABOVE (OR BELOW) BOTTOM OF WASTE ⁽²⁾
LW-06	18-Jul-07	814.60	NA ⁽³⁾	NA ⁽³⁾
LW-06	7-Aug-07	815.81	NA ⁽³⁾	NA ⁽³⁾
LW-06	13-Sep-07	815.11	NA ⁽³⁾	NA ⁽³⁾
LW-06	3-Oct-07	814.59	NA ⁽³⁾	NA ⁽³⁾
LW-06	9-Nov-07	815.35	NA ⁽³⁾	NA ⁽³⁾
LW-06	18-Dec-07	814.76	NA ⁽³⁾	NA ⁽³⁾
LW-06	28-Jan-08	814.6	NA ⁽³⁾	NA ⁽³⁾
LW-06	20-Feb-08	814.54	NA ⁽³⁾	NA ⁽³⁾
LW-06	11-Mar-08	815.33	NA ⁽³⁾	NA ⁽³⁾
LW-06	28-Apr-08	814.43	NA ⁽³⁾	NA ⁽³⁾
LW-06	21-May-08	814.91	NA ⁽³⁾	NA ⁽³⁾
LW-06	12-Jun-08	815.64	NA ⁽³⁾	NA ⁽³⁾
LW-07	18-Jul-07	816.88	NA ⁽³⁾	NA ⁽³⁾
LW-07	7-Aug-07	816.85	NA ⁽³⁾	NA ⁽³⁾
LW-07	13-Sep-07	817.50	NA ⁽³⁾	NA ⁽³⁾
LW-07	3-Oct-07	817.38	NA ⁽³⁾	NA ⁽³⁾
LW-07	9-Nov-07	817.96	NA ⁽³⁾	NA ⁽³⁾
LW-07	18-Dec-07	817.03	NA ⁽³⁾	NA ⁽³⁾
LW-07	28-Jan-08	816.94	NA ⁽³⁾	NA ⁽³⁾
LW-07	20-Feb-08	817.17	NA ⁽³⁾	NA ⁽³⁾
LW-07	11-Mar-08	816.87	NA ⁽³⁾	NA ⁽³⁾
LW-07	28-Apr-08	817.62	NA ⁽³⁾	NA ⁽³⁾
LW-07	21-May-08	816.68	NA ⁽³⁾	NA ⁽³⁾
LW-07	12-Jun-08	816.81	NA ⁽³⁾	NA ⁽³⁾
LW-08	18-Jul-07	821.61	NA ⁽³⁾	NA ⁽³⁾
LW-08	7-Aug-07	821.53	NA ⁽³⁾	NA ⁽³⁾
LW-08	13-Sep-07	821.94	NA ⁽³⁾	NA ⁽³⁾
LW-08	3-Oct-07	821.69	NA ⁽³⁾	NA ⁽³⁾
LW-08	9-Nov-07	821.86	NA ⁽³⁾	NA ⁽³⁾
LW-08	18-Dec-07	821.58	NA ⁽³⁾	NA ⁽³⁾
LW-08	28-Jan-08	821.84	NA ⁽³⁾	NA ⁽³⁾
LW-08	20-Feb-08	822.16	NA ⁽³⁾	NA ⁽³⁾
LW-08	11-Mar-08	821.78	NA ⁽³⁾	NA ⁽³⁾
LW-08	28-Apr-08	822.14	NA ⁽³⁾	NA ⁽³⁾
LW-08	21-May-08	821.66	NA ⁽³⁾	NA ⁽³⁾
LW-08	12-Jun-08	822.05	NA ⁽³⁾	NA ⁽³⁾
MW-14R	18-Jul-07	833.72	842.7	-8.98
MW-14R	7-Aug-07	833.72	842.7	-8.98
MW-14R	13-Sep-07	833.72	842.7	-8.98
MW-14R	3-Oct-07	833.72	842.7	-8.98
MW-14R	9-Nov-07	833.67	842.7	-9.03
MW-14R	18-Dec-07	833.67	842.7	-9.03
MW-14R	28-Jan-08	833.67	842.7	-9.03
MW-14R	20-Feb-08	833.67	842.7	-9.03
MW-14R	11-Mar-08	833.67	842.7	-9.03
MW-14R	28-Apr-08	833.67	842.7	-9.03
MW-14R	21-May-08	833.67	842.7	-9.03
MW-14R	12-Jun-08	833.67	842.7	-9.03

Lemberger Landfill
Leachate Head Levels (July 2007 - June 2008)

WELL ID	DATE	LEACHATE HEAD ELEVATION (feet, above M.S.L.)	BOTTOM OF WASTE ELEVATION (feet, above M.S.L.) ⁽¹⁾	FEET ABOVE (OR BELOW) BOTTOM OF WASTE ⁽²⁾
MW-15R	18-Jul-07	831.53	840.5	-8.97
MW-15R	7-Aug-07	831.48	840.5	-9.02
MW-15R	13-Sep-07	831.44	840.5	-9.06
MW-15R	3-Oct-07	831.42	840.5	-9.08
MW-15R	9-Nov-07	831.34	840.5	-9.16
MW-15R	18-Dec-07	831.26	840.5	-9.24
MW-15R	28-Jan-08	831.18	840.5	-9.32
MW-15R	20-Feb-08	831.13	840.5	-9.37
MW-15R	11-Mar-08	831.05	840.5	-9.45
MW-15R	28-Apr-08	831.03	840.5	-9.47
MW-15R	21-May-08	831	840.5	-9.50
MW-15R	12-Jun-08	830.97	840.5	-9.53

Notes:

- ⁽¹⁾ Bottom of waste elevations are approximate for "LH" wells.
- ⁽²⁾ Negative values indicate that the liquid level is below the bottom of waste.
- ⁽³⁾ NA = not applicable; no waste was encountered in drilling of well.

Appendix B
Tabular Summary of
Historical Leachate Quality - Detections Only

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	6/18/1998	1,1-DICHLOROETHANE	7.7	µg/L		5/11
LEACHATE	6/17/1999	1,1-DICHLOROETHANE	1.1	µg/L	Q	
LEACHATE	6/15/2000	1,1-DICHLOROETHANE	2.8	µg/L		
LEACHATE	6/14/2001	1,1-DICHLOROETHANE	4.1	µg/L		
LEACHATE	6/14/2002	1,1-DICHLOROETHANE	1.1	µg/L	Q	
LEACHATE	9/25/1997	1,2-DICHLOROETHENE, TOTAL	1.1	µg/L	Q	4/11
LEACHATE	6/18/1998	1,2-DICHLOROETHENE, TOTAL	3	µg/L		
LEACHATE	6/17/1999	1,2-DICHLOROETHENE, TOTAL	1	µg/L	Q	
LEACHATE	6/15/2000	1,2-DICHLOROETHENE, TOTAL	1.3	µg/L	Q	
LEACHATE	6/15/2000	2,3,7,8-TCDD	0.0286	ng/L		1/11
LEACHATE	6/14/2002	2,3,7,8-TCDF	0.00105	ng/L	j	1/11
LEACHATE	6/14/2001	2,4-DIMETHYLPHENOL	1.7	µg/L	Q	2/11
LEACHATE	6/14/2005	2,4-DIMETHYLPHENOL	8.5	µg/L		
LEACHATE	6/14/2002	2-BUTANONE	3.5	µg/L	Q	1/1
LEACHATE	6/14/2002	ACETONE	3.1	µg/L	Q	1/1
LEACHATE	12/3/2003	ALUMINUM, DISSOLVED	95	µg/L	A	6/18
LEACHATE	3/4/2004	ALUMINUM, DISSOLVED	35	µg/L	A	
LEACHATE	9/7/2004	ALUMINUM, DISSOLVED	46	µg/L		
LEACHATE	3/9/2005	ALUMINUM, DISSOLVED	8.9	µg/L	A	
LEACHATE	11/12/2007	ALUMINUM, DISSOLVED	11	µg/L	Q	
LEACHATE	5/30/2008	ALUMINUM, DISSOLVED	14.8	µg/L		
LEACHATE	12/3/2003	ALUMINUM, TOTAL	320	µg/L	A	8/14
LEACHATE	3/4/2004	ALUMINUM, TOTAL	21000	µg/L		
LEACHATE	9/7/2004	ALUMINUM, TOTAL	1500	µg/L		
LEACHATE	12/8/2004	ALUMINUM, TOTAL	59	µg/L	Q	
LEACHATE	3/9/2005	ALUMINUM, TOTAL	25	µg/L	A	
LEACHATE	12/14/2005	ALUMINUM, TOTAL	180	µg/L		
LEACHATE	11/17/2006	ALUMINUM, TOTAL	9.1	µg/L	Q	
LEACHATE	2/23/2007	ALUMINUM, TOTAL	7.9	µg/L	Q	
LEACHATE	8/17/2007	ANTIMONY, TOTAL	0.46	µg/L		1/11
LEACHATE	9/25/1997	ARSENIC, TOTAL	8.1	µg/L	Q	9/11
LEACHATE	6/17/1999	ARSENIC, TOTAL	54	µg/L		
LEACHATE	6/15/2000	ARSENIC, TOTAL	110	µg/L		
LEACHATE	6/14/2001	ARSENIC, TOTAL	13	µg/L	Q	
LEACHATE	6/13/2003	ARSENIC, TOTAL	10	µg/L		
LEACHATE	6/3/2004	ARSENIC, TOTAL	16	µg/L		
LEACHATE	6/14/2005	ARSENIC, TOTAL	7.6	µg/L		
LEACHATE	6/9/2006	ARSENIC, TOTAL	5.3	µg/L		
LEACHATE	8/17/2007	ARSENIC, TOTAL	7.1	µg/L		
LEACHATE	9/25/1997	BENZENE	1.9	µg/L		11/11
LEACHATE	6/18/1998	BENZENE	4.6	µg/L		
LEACHATE	6/17/1999	BENZENE	2.7	µg/L		
LEACHATE	6/15/2000	BENZENE	8.1	µg/L		
LEACHATE	6/14/2001	BENZENE	11	µg/L		
LEACHATE	6/14/2002	BENZENE	8.3	µg/L		
LEACHATE	6/13/2003	BENZENE	6.2	µg/L		
LEACHATE	6/3/2004	BENZENE	1.4	µg/L		
LEACHATE	6/14/2005	BENZENE	4.7	µg/L		
LEACHATE	6/9/2006	BENZENE	2.2	µg/L		
LEACHATE	8/17/2007	BENZENE	4.7	µg/L		
LEACHATE	8/17/2007	BERYLLIUM, TOTAL	0.19	µg/L	Q	1/11
LEACHATE	6/15/2000	BIS(2-CHLOROETHYL)ETHER	0.9	µg/L	Q	2/11
LEACHATE	6/14/2001	BIS(2-CHLOROETHYL)ETHER	0.74	µg/L	Q	

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	3/21/1997	BOD	44	mg/L		70/79
LEACHATE	4/3/1997	BOD	10	mg/L		
LEACHATE	4/10/1997	BOD	4	mg/L		
LEACHATE	4/17/1997	BOD	10	mg/L		
LEACHATE	5/29/1997	BOD	9.7	mg/L	BB	
LEACHATE	6/27/1997	BOD	8.6	mg/L	BB,BI	
LEACHATE	7/24/1997	BOD	19	mg/L		
LEACHATE	8/28/1997	BOD	3.6	mg/L	Q	
LEACHATE	9/5/1997	BOD	28.4	mg/L		
LEACHATE	9/25/1997	BOD	12	mg/L		
LEACHATE	11/26/1997	BOD	12	mg/L		
LEACHATE	1/28/1998	BOD	19	mg/L	BB	
LEACHATE	2/25/1998	BOD	55	mg/L		
LEACHATE	3/11/1998	BOD	12	mg/L		
LEACHATE	4/16/1998	BOD	26	mg/L		
LEACHATE	5/14/1998	BOD	6	mg/L		
LEACHATE	6/18/1998	BOD	48	mg/L		
LEACHATE	7/9/1998	BOD	20	mg/L		
LEACHATE	10/20/1998	BOD	6	mg/L		
LEACHATE	11/6/1998	BOD	23	mg/L		
LEACHATE	12/2/1998	BOD	16	mg/L		
LEACHATE	1/6/1999	BOD	338	mg/L	BQ	
LEACHATE	2/3/1999	BOD	15	mg/L		
LEACHATE	3/9/1999	BOD	5.4	mg/L		
LEACHATE	4/7/1999	BOD	11	mg/L	BB	
LEACHATE	6/17/1999	BOD	11	mg/L		
LEACHATE	8/12/1999	BOD	39	mg/L		
LEACHATE	9/8/1999	BOD	7	mg/L	Y5	
LEACHATE	10/14/1999	BOD	182	mg/L		
LEACHATE	11/4/1999	BOD	41	mg/L		
LEACHATE	12/1/1999	BOD	5	mg/L	QN	
LEACHATE	1/5/2000	BOD	9	mg/L	NY	
LEACHATE	2/3/2000	BOD	8	mg/L	Q	
LEACHATE	4/4/2000	BOD	26	mg/L		
LEACHATE	6/15/2000	BOD	8	mg/L		
LEACHATE	7/5/2000	BOD	25	mg/L	Y	
LEACHATE	8/2/2000	BOD	3.1	mg/L		
LEACHATE	9/7/2000	BOD	79	mg/L	N	
LEACHATE	10/4/2000	BOD	9.2	mg/L		
LEACHATE	11/2/2000	BOD	5.4	mg/L		
LEACHATE	12/6/2000	BOD	5.4	mg/L		
LEACHATE	2/1/2001	BOD	7	mg/L		
LEACHATE	3/1/2001	BOD	18	mg/L		
LEACHATE	4/3/2001	BOD	18	mg/L		
LEACHATE	5/2/2001	BOD	8	mg/L		
LEACHATE	6/14/2001	BOD	16	mg/L		
LEACHATE	9/5/2001	BOD	11	mg/L		
LEACHATE	12/4/2001	BOD	165	mg/L	N	
LEACHATE	3/1/2002	BOD	7	mg/L	N	
LEACHATE	12/4/2002	BOD	6.1	mg/L		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	3/6/2003	BOD	22	mg/L		
LEACHATE	6/13/2003	BOD	14	mg/L		
LEACHATE	9/3/2003	BOD	11	mg/L		
LEACHATE	12/3/2003	BOD	18	mg/L		
LEACHATE	3/4/2004	BOD	6.1	mg/L		
LEACHATE	6/3/2004	BOD	5.6	mg/L		
LEACHATE	9/7/2004	BOD	4	mg/L		
LEACHATE	3/9/2005	BOD	6.5	mg/L		
LEACHATE	6/14/2005	BOD	3	mg/L		
LEACHATE	9/14/2005	BOD	9.4	mg/L		
LEACHATE	12/14/2005	BOD	12	mg/L		
LEACHATE	3/9/2006	BOD	6.9	mg/L		
LEACHATE	6/9/2006	BOD	8.7	mg/L		
LEACHATE	11/17/2006	BOD	16	mg/L		
LEACHATE	2/23/2007	BOD	4.8	mg/L		
LEACHATE	5/22/2007	BOD	7.2	mg/L		
LEACHATE	8/17/2007	BOD	6.1	mg/L		
LEACHATE	11/12/2007	BOD	9.4	mg/L		
LEACHATE	2/28/2008	BOD	8	mg/L		18/82
LEACHATE	5/30/2008	BOD	6	mg/L		
LEACHATE	9/5/1997	CADMIUM, TOTAL	0.73	µg/L		
LEACHATE	4/16/1998	CADMIUM, TOTAL	0.47	µg/L	Q	
LEACHATE	2/3/1999	CADMIUM, TOTAL	5.3	µg/L		
LEACHATE	3/9/1999	CADMIUM, TOTAL	0.58	µg/L	Q	
LEACHATE	7/8/1999	CADMIUM, TOTAL	0.85	µg/L	Q	
LEACHATE	10/14/1999	CADMIUM, TOTAL	8.7	µg/L		
LEACHATE	6/15/2000	CADMIUM, TOTAL	0.89	µg/L	QA	
LEACHATE	7/5/2000	CADMIUM, TOTAL	0.91	µg/L	Q	
LEACHATE	4/3/2001	CADMIUM, TOTAL	1.6	µg/L	*	
LEACHATE	12/4/2001	CADMIUM, TOTAL	2.1	µg/L		
LEACHATE	12/4/2002	CADMIUM, TOTAL	0.56	µg/L	Q	
LEACHATE	9/3/2003	CADMIUM, TOTAL	0.71	µg/L	Q	
LEACHATE	3/4/2004	CADMIUM, TOTAL	3.2	µg/L		
LEACHATE	9/7/2004	CADMIUM, TOTAL	0.21	µg/L	Q	
LEACHATE	3/9/2005	CADMIUM, TOTAL	0.34	µg/L	QA	14/14
LEACHATE	9/14/2005	CADMIUM, TOTAL	0.52	µg/L	Q	
LEACHATE	11/17/2006	CADMIUM, TOTAL	0.19	µg/L	Q	
LEACHATE	11/12/2007	CADMIUM, TOTAL	0.19	µg/L	Q	
LEACHATE	12/3/2003	CHLORIDE	230	mg/L		
LEACHATE	3/4/2004	CHLORIDE	220	mg/L		
LEACHATE	9/7/2004	CHLORIDE	230	mg/L		
LEACHATE	12/8/2004	CHLORIDE	200	mg/L		
LEACHATE	3/9/2005	CHLORIDE	220	mg/L		
LEACHATE	9/14/2005	CHLORIDE	210	mg/L		
LEACHATE	12/14/2005	CHLORIDE	250	mg/L		
LEACHATE	3/9/2006	CHLORIDE	200	mg/L		
LEACHATE	11/17/2006	CHLORIDE	200	mg/L	N	
LEACHATE	2/23/2007	CHLORIDE	220	mg/L		
LEACHATE	5/22/2007	CHLORIDE	210	mg/L		
LEACHATE	11/12/2007	CHLORIDE	210	mg/L		
LEACHATE	2/28/2008	CHLORIDE	213	mg/L		
LEACHATE	5/30/2008	CHLORIDE	203	mg/L	B	1/11
LEACHATE	6/15/2000	CHLOROBENZENE	0.48	µg/L	Q	

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	6/18/1998	CHLOROETHANE	38	µg/L		9/11
LEACHATE	6/17/1999	CHLOROETHANE	5.5	µg/L		
LEACHATE	6/15/2000	CHLOROETHANE	80	µg/L		
LEACHATE	6/14/2001	CHLOROETHANE	81	µg/L		
LEACHATE	6/14/2002	CHLOROETHANE	55	µg/L		
LEACHATE	6/13/2003	CHLOROETHANE	30	µg/L		
LEACHATE	6/14/2005	CHLOROETHANE	6.9	µg/L		
LEACHATE	6/9/2006	CHLOROETHANE	2.5	µg/L	Q	
LEACHATE	8/17/2007	CHLOROETHANE	3.7	µg/L		63/82
LEACHATE	3/21/1997	CHROMIUM, TOTAL	5.1	µg/L		
LEACHATE	4/3/1997	CHROMIUM, TOTAL	3	µg/L	Q	
LEACHATE	4/10/1997	CHROMIUM, TOTAL	17	µg/L		
LEACHATE	4/17/1997	CHROMIUM, TOTAL	2.7	µg/L	Q	
LEACHATE	9/5/1997	CHROMIUM, TOTAL	9	µg/L		
LEACHATE	9/25/1997	CHROMIUM, TOTAL	18	µg/L		
LEACHATE	10/8/1997	CHROMIUM, TOTAL	3.3	µg/L	Q	
LEACHATE	1/28/1998	CHROMIUM, TOTAL	5.8	µg/L	B	
LEACHATE	2/25/1998	CHROMIUM, TOTAL	3.6	µg/L		
LEACHATE	4/16/1998	CHROMIUM, TOTAL	1.7	µg/L	Q	
LEACHATE	10/8/1998	CHROMIUM, TOTAL	3.1	µg/L		
LEACHATE	12/2/1998	CHROMIUM, TOTAL	150	µg/L		
LEACHATE	2/3/1999	CHROMIUM, TOTAL	56	µg/L		
LEACHATE	3/9/1999	CHROMIUM, TOTAL	4.2	µg/L		
LEACHATE	4/7/1999	CHROMIUM, TOTAL	2.1	µg/L		
LEACHATE	5/6/1999	CHROMIUM, TOTAL	210	µg/L		
LEACHATE	6/17/1999	CHROMIUM, TOTAL	20	µg/L		
LEACHATE	7/8/1999	CHROMIUM, TOTAL	38	µg/L		
LEACHATE	8/12/1999	CHROMIUM, TOTAL	4.7	µg/L		
LEACHATE	9/8/1999	CHROMIUM, TOTAL	65	µg/L		
LEACHATE	10/14/1999	CHROMIUM, TOTAL	130	µg/L	N	
LEACHATE	11/4/1999	CHROMIUM, TOTAL	39	µg/L		
LEACHATE	12/1/1999	CHROMIUM, TOTAL	6.6	µg/L		
LEACHATE	1/5/2000	CHROMIUM, TOTAL	6	µg/L		
LEACHATE	2/3/2000	CHROMIUM, TOTAL	29	µg/L		
LEACHATE	3/1/2000	CHROMIUM, TOTAL	22	µg/L		
LEACHATE	4/4/2000	CHROMIUM, TOTAL	29	µg/L		
LEACHATE	5/3/2000	CHROMIUM, TOTAL	62	µg/L		
LEACHATE	6/15/2000	CHROMIUM, TOTAL	19	µg/L		
LEACHATE	7/5/2000	CHROMIUM, TOTAL	8.9	µg/L		
LEACHATE	8/2/2000	CHROMIUM, TOTAL	100	µg/L		
LEACHATE	9/7/2000	CHROMIUM, TOTAL	22	µg/L		
LEACHATE	10/4/2000	CHROMIUM, TOTAL	7.6	µg/L		
LEACHATE	11/2/2000	CHROMIUM, TOTAL	15	µg/L		
LEACHATE	12/6/2000	CHROMIUM, TOTAL	5.7	µg/L		
LEACHATE	1/4/2001	CHROMIUM, TOTAL	38	µg/L	Ej	
LEACHATE	2/1/2001	CHROMIUM, TOTAL	37	µg/L		
LEACHATE	4/3/2001	CHROMIUM, TOTAL	15	µg/L		
LEACHATE	5/2/2001	CHROMIUM, TOTAL	5.8	µg/L		
LEACHATE	6/14/2001	CHROMIUM, TOTAL	5.7	µg/L		
LEACHATE	9/5/2001	CHROMIUM, TOTAL	37	µg/L		
LEACHATE	12/4/2001	CHROMIUM, TOTAL	20	µg/L		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	9/3/2002	CHROMIUM, TOTAL	9.1	µg/L		
LEACHATE	12/4/2002	CHROMIUM, TOTAL	1.7	µg/L	Q	
LEACHATE	3/6/2003	CHROMIUM, TOTAL	3	µg/L		
LEACHATE	6/13/2003	CHROMIUM, TOTAL	4	µg/L	Q	
LEACHATE	12/3/2003	CHROMIUM, TOTAL	6.9	µg/L		
LEACHATE	3/4/2004	CHROMIUM, TOTAL	45	µg/L		
LEACHATE	6/3/2004	CHROMIUM, TOTAL	4.7	µg/L		
LEACHATE	9/7/2004	CHROMIUM, TOTAL	8.7	µg/L		
LEACHATE	12/8/2004	CHROMIUM, TOTAL	3.9	µg/L		
LEACHATE	3/9/2005	CHROMIUM, TOTAL	3.4	µg/L	A	
LEACHATE	6/14/2005	CHROMIUM, TOTAL	2.7	µg/L		
LEACHATE	9/14/2005	CHROMIUM, TOTAL	4.8	µg/L	Q	
LEACHATE	12/14/2005	CHROMIUM, TOTAL	5.8	µg/L		
LEACHATE	3/9/2006	CHROMIUM, TOTAL	2.5	µg/L		
LEACHATE	6/9/2006	CHROMIUM, TOTAL	4.6	µg/L	A	
LEACHATE	11/17/2006	CHROMIUM, TOTAL	1.9	µg/L		
LEACHATE	2/23/2007	CHROMIUM, TOTAL	2	µg/L		
LEACHATE	5/22/2007	CHROMIUM, TOTAL	2.6	µg/L		
LEACHATE	8/17/2007	CHROMIUM, TOTAL	2.4	µg/L		
LEACHATE	11/12/2007	CHROMIUM, TOTAL	4.5	µg/L		
LEACHATE	5/30/2008	CHROMIUM, TOTAL	2	µg/L		
LEACHATE	1/28/1998	CONDUCTANCE, SPECIFIC	700	µmhos/cm		69/69
LEACHATE	2/25/1998	CONDUCTANCE, SPECIFIC	1250	µmhos/cm		
LEACHATE	3/11/1998	CONDUCTANCE, SPECIFIC	1200	µmhos/cm		
LEACHATE	4/16/1998	CONDUCTANCE, SPECIFIC	1300	µmhos/cm		
LEACHATE	5/14/1998	CONDUCTANCE, SPECIFIC	1450	µmhos/cm		
LEACHATE	6/18/1998	CONDUCTANCE, SPECIFIC	900	µmhos/cm		
LEACHATE	7/9/1998	CONDUCTANCE, SPECIFIC	1000	µmhos/cm		
LEACHATE	8/13/1998	CONDUCTANCE, SPECIFIC	900	µmhos/cm		
LEACHATE	9/9/1998	CONDUCTANCE, SPECIFIC	1200	µmhos/cm		
LEACHATE	10/8/1998	CONDUCTANCE, SPECIFIC	1000	µmhos/cm		
LEACHATE	11/6/1998	CONDUCTANCE, SPECIFIC	900	µmhos/cm		
LEACHATE	12/2/1998	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	1/6/1999	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	2/3/1999	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	3/9/1999	CONDUCTANCE, SPECIFIC	1200	µmhos/cm		
LEACHATE	4/7/1999	CONDUCTANCE, SPECIFIC	1400	µmhos/cm		
LEACHATE	5/6/1999	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	6/17/1999	CONDUCTANCE, SPECIFIC	1300	µmhos/cm		
LEACHATE	7/8/1999	CONDUCTANCE, SPECIFIC	1200	µmhos/cm		
LEACHATE	8/12/1999	CONDUCTANCE, SPECIFIC	1200	µmhos/cm		
LEACHATE	9/8/1999	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	10/14/1999	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	11/4/1999	CONDUCTANCE, SPECIFIC	1500	µmhos/cm		
LEACHATE	12/1/1999	CONDUCTANCE, SPECIFIC	1100	µmhos/cm		
LEACHATE	1/5/2000	CONDUCTANCE, SPECIFIC	1400	µmhos/cm		
LEACHATE	2/3/2000	CONDUCTANCE, SPECIFIC	1200	µmhos/cm		
LEACHATE	3/1/2000	CONDUCTANCE, SPECIFIC	1300	µmhos/cm		
LEACHATE	4/4/2000	CONDUCTANCE, SPECIFIC	1300	µmhos/cm		
LEACHATE	5/3/2000	CONDUCTANCE, SPECIFIC	1400	µmhos/cm		
LEACHATE	6/15/2000	CONDUCTANCE, SPECIFIC	1600	µmhos/cm		
LEACHATE	7/5/2000	CONDUCTANCE, SPECIFIC	1400	µmhos/cm		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	8/2/2000	CONDUCTANCE, SPECIFIC	1200	μmhos/cm		
LEACHATE	9/7/2000	CONDUCTANCE, SPECIFIC	1300	μmhos/cm		
LEACHATE	10/4/2000	CONDUCTANCE, SPECIFIC	1300	μmhos/cm		
LEACHATE	11/2/2000	CONDUCTANCE, SPECIFIC	1300	μmhos/cm		
LEACHATE	12/6/2000	CONDUCTANCE, SPECIFIC	1300	μmhos/cm		
LEACHATE	1/4/2001	CONDUCTANCE, SPECIFIC	900	μmhos/cm		
LEACHATE	2/1/2001	CONDUCTANCE, SPECIFIC	1100	μmhos/cm		
LEACHATE	3/1/2001	CONDUCTANCE, SPECIFIC	900	μmhos/cm		
LEACHATE	4/3/2001	CONDUCTANCE, SPECIFIC	1200	μmhos/cm		
LEACHATE	5/2/2001	CONDUCTANCE, SPECIFIC	1200	μmhos/cm		
LEACHATE	6/14/2001	CONDUCTANCE, SPECIFIC	1400	μmhos/cm		
LEACHATE	9/5/2001	CONDUCTANCE, SPECIFIC	1200	μmhos/cm		
LEACHATE	12/4/2001	CONDUCTANCE, SPECIFIC	1200	μmhos/cm		
LEACHATE	3/1/2002	CONDUCTANCE, SPECIFIC	1984	μmhos/cm		
LEACHATE	6/14/2002	CONDUCTANCE, SPECIFIC	1996	μmhos/cm		
LEACHATE	9/3/2002	CONDUCTANCE, SPECIFIC	1944	μmhos/cm		
LEACHATE	12/4/2002	CONDUCTANCE, SPECIFIC	1724	μmhos/cm		
LEACHATE	3/6/2003	CONDUCTANCE, SPECIFIC	1764	μmhos/cm		
LEACHATE	6/13/2003	CONDUCTANCE, SPECIFIC	1647	μmhos/cm		
LEACHATE	9/3/2003	CONDUCTANCE, SPECIFIC	1882	μmhos/cm		
LEACHATE	12/3/2003	CONDUCTANCE, SPECIFIC	1884	μmhos/cm		
LEACHATE	3/4/2004	CONDUCTANCE, SPECIFIC	1894	μmhos/cm		
LEACHATE	6/3/2004	CONDUCTANCE, SPECIFIC	1896	μmhos/cm		
LEACHATE	9/7/2004	CONDUCTANCE, SPECIFIC	1874	μmhos/cm		
LEACHATE	12/8/2004	CONDUCTANCE, SPECIFIC	1892	μmhos/cm		
LEACHATE	3/9/2005	CONDUCTANCE, SPECIFIC	1886	μmhos/cm		
LEACHATE	6/14/2005	CONDUCTANCE, SPECIFIC	1894	μmhos/cm		
LEACHATE	9/14/2005	CONDUCTANCE, SPECIFIC	1890	μmhos/cm		
LEACHATE	12/14/2005	CONDUCTANCE, SPECIFIC	1896	μmhos/cm		
LEACHATE	3/9/2006	CONDUCTANCE, SPECIFIC	1896	μmhos/cm		
LEACHATE	6/9/2006	CONDUCTANCE, SPECIFIC	1892	μmhos/cm		
LEACHATE	11/17/2006	CONDUCTANCE, SPECIFIC	1888	μmhos/cm		
LEACHATE	2/23/2007	CONDUCTANCE, SPECIFIC	1878	μmhos/cm		
LEACHATE	5/22/2007	CONDUCTANCE, SPECIFIC	1852	μmhos/cm		
LEACHATE	8/17/2007	CONDUCTANCE, SPECIFIC	1922	μmhos/cm		
LEACHATE	11/12/2007	CONDUCTANCE, SPECIFIC	2250	μmhos/cm		
LEACHATE	2/28/2008	CONDUCTANCE, SPECIFIC	2450	μmhos/cm		
LEACHATE	5/30/2008	CONDUCTANCE, SPECIFIC	2400	μmhos/cm		
LEACHATE	5/29/1997	COPPER, TOTAL	2.7	μg/L	Q	59/82
LEACHATE	7/24/1997	COPPER, TOTAL	10	μg/L		
LEACHATE	8/28/1997	COPPER, TOTAL	4.7	μg/L	Q	
LEACHATE	9/5/1997	COPPER, TOTAL	30	μg/L		
LEACHATE	9/25/1997	COPPER, TOTAL	12	μg/L		
LEACHATE	1/28/1998	COPPER, TOTAL	6.2	μg/L		
LEACHATE	4/16/1998	COPPER, TOTAL	2.3	μg/L	Q	
LEACHATE	5/14/1998	COPPER, TOTAL	6	μg/L		
LEACHATE	6/18/1998	COPPER, TOTAL	8.9	μg/L		
LEACHATE	9/9/1998	COPPER, TOTAL	7.4	μg/L		
LEACHATE	10/8/1998	COPPER, TOTAL	4.8	μg/L	Q	
LEACHATE	11/6/1998	COPPER, TOTAL	2.5	μg/L	Q	
LEACHATE	12/2/1998	COPPER, TOTAL	160	μg/L		
LEACHATE	2/3/1999	COPPER, TOTAL	38	μg/L		

Leachate Results - Detections Only
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WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	4/7/1999	COPPER, TOTAL	4.3	µg/L	Q*	
LEACHATE	5/6/1999	COPPER, TOTAL	87	µg/L		
LEACHATE	6/17/1999	COPPER, TOTAL	20	µg/L		
LEACHATE	7/8/1999	COPPER, TOTAL	68	µg/L	A	
LEACHATE	9/8/1999	COPPER, TOTAL	69	µg/L	E	
LEACHATE	10/14/1999	COPPER, TOTAL	140	µg/L		
LEACHATE	11/4/1999	COPPER, TOTAL	37	µg/L		
LEACHATE	12/1/1999	COPPER, TOTAL	12	µg/L		
LEACHATE	1/5/2000	COPPER, TOTAL	14	µg/L		
LEACHATE	2/3/2000	COPPER, TOTAL	50	µg/L		
LEACHATE	3/1/2000	COPPER, TOTAL	41	µg/L		
LEACHATE	4/4/2000	COPPER, TOTAL	33	µg/L		
LEACHATE	5/3/2000	COPPER, TOTAL	47	µg/L		
LEACHATE	7/5/2000	COPPER, TOTAL	14	µg/L		
LEACHATE	8/2/2000	COPPER, TOTAL	71	µg/L		
LEACHATE	9/7/2000	COPPER, TOTAL	9.6	µg/L	QED	
LEACHATE	10/4/2000	COPPER, TOTAL	5.1	µg/L	Q	
LEACHATE	11/2/2000	COPPER, TOTAL	9.4	µg/L		
LEACHATE	12/6/2000	COPPER, TOTAL	2.6	µg/L	Q	
LEACHATE	1/4/2001	COPPER, TOTAL	56	µg/L		
LEACHATE	2/1/2001	COPPER, TOTAL	34	µg/L		
LEACHATE	3/1/2001	COPPER, TOTAL	3.8	µg/L	Q	
LEACHATE	9/5/2001	COPPER, TOTAL	19	µg/L		
LEACHATE	6/14/2002	COPPER, TOTAL	4.3	µg/L		
LEACHATE	9/3/2002	COPPER, TOTAL	18	µg/L		
LEACHATE	12/4/2002	COPPER, TOTAL	3.2	µg/L	Q	
LEACHATE	3/6/2003	COPPER, TOTAL	2.5	µg/L	QA	
LEACHATE	6/13/2003	COPPER, TOTAL	7.2	µg/L		
LEACHATE	9/3/2003	COPPER, TOTAL	32	µg/L		
LEACHATE	12/3/2003	COPPER, TOTAL	19	µg/L		
LEACHATE	3/4/2004	COPPER, TOTAL	66	µg/L	Ej	
LEACHATE	6/3/2004	COPPER, TOTAL	5.8	µg/L		
LEACHATE	9/7/2004	COPPER, TOTAL	17	µg/L		
LEACHATE	12/8/2004	COPPER, TOTAL	4.2	µg/L		
LEACHATE	3/9/2005	COPPER, TOTAL	5.7	µg/L		
LEACHATE	12/14/2005	COPPER, TOTAL	3.3	µg/L	Q	
LEACHATE	3/9/2006	COPPER, TOTAL	5.2	µg/L	Q	
LEACHATE	6/9/2006	COPPER, TOTAL	6.3	µg/L	Q	
LEACHATE	11/17/2006	COPPER, TOTAL	6.9	µg/L		
LEACHATE	2/23/2007	COPPER, TOTAL	3.6	µg/L		
LEACHATE	5/22/2007	COPPER, TOTAL	2.9	µg/L		
LEACHATE	8/17/2007	COPPER, TOTAL	2.2	µg/L		
LEACHATE	11/12/2007	COPPER, TOTAL	6.8	µg/L		
LEACHATE	2/28/2008	COPPER, TOTAL	2.7	µg/L		
LEACHATE	5/30/2008	COPPER, TOTAL	4.3	µg/L		
LEACHATE	4/17/1997	CYANIDE, TOTAL	0.0014	mg/L	Q	5/82
LEACHATE	5/29/1997	CYANIDE, TOTAL	0.0021	mg/L	Q	
LEACHATE	9/5/1997	CYANIDE, TOTAL	0.006	mg/L		
LEACHATE	9/3/2003	CYANIDE, TOTAL	0.0016	mg/L	Q	
LEACHATE	12/8/2004	CYANIDE, TOTAL	0.01	mg/L	Q	
LEACHATE	6/14/2005	DELTA-BHC	0.016	µg/L	Q	1/11
LEACHATE	6/3/2004	DI-N-BUTYLPHTHALATE	5.7	µg/L	Q	2/11
LEACHATE	6/9/2006	DI-N-BUTYLPHTHALATE	3.2	µg/L	Q	

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	9/25/1997	DIETHYLPHTHALATE	4	µg/L		11/11
LEACHATE	6/18/1998	DIETHYLPHTHALATE	7.5	µg/L		
LEACHATE	6/17/1999	DIETHYLPHTHALATE	4.3	µg/L		
LEACHATE	6/15/2000	DIETHYLPHTHALATE	6	µg/L		
LEACHATE	6/14/2001	DIETHYLPHTHALATE	6.9	µg/L		
LEACHATE	6/14/2002	DIETHYLPHTHALATE	2.6	µg/L	Q	
LEACHATE	6/13/2003	DIETHYLPHTHALATE	4.2	µg/L	Q	
LEACHATE	6/3/2004	DIETHYLPHTHALATE	2.2	µg/L	Q	
LEACHATE	6/14/2005	DIETHYLPHTHALATE	6.7	µg/L	Q	
LEACHATE	6/9/2006	DIETHYLPHTHALATE	3.2	µg/L	Q	
LEACHATE	8/17/2007	DIETHYLPHTHALATE	2	µg/L	Q	
LEACHATE	9/25/1997	ETHYLBENZENE	0.43	µg/L	Q	3/11
LEACHATE	6/18/1998	ETHYLBENZENE	1.1	µg/L	Q	
LEACHATE	6/14/2001	ETHYLBENZENE	0.64	µg/L	Q	
LEACHATE	6/9/2006	FLUORENE	0.012	µg/L	Q	2/11
LEACHATE	8/17/2007	FLUORENE	0.018	µg/L	Q	
LEACHATE	6/14/2005	HEPTACHLOR EPOXIDE	0.055	µg/L	Pj	1/11
LEACHATE	12/3/2003	IRON, DISSOLVED	31000	µg/L		18/18
LEACHATE	3/4/2004	IRON, DISSOLVED	20000	µg/L		
LEACHATE	6/3/2004	IRON, DISSOLVED	580	µg/L		
LEACHATE	9/7/2004	IRON, DISSOLVED	12000	µg/L		
LEACHATE	12/8/2004	IRON, DISSOLVED	19000	µg/L		
LEACHATE	3/9/2005	IRON, DISSOLVED	17000	µg/L		
LEACHATE	6/14/2005	IRON, DISSOLVED	25000	µg/L		
LEACHATE	9/14/2005	IRON, DISSOLVED	18000	µg/L		
LEACHATE	12/14/2005	IRON, DISSOLVED	20000	µg/L		
LEACHATE	3/9/2006	IRON, DISSOLVED	25000	µg/L		
LEACHATE	6/9/2006	IRON, DISSOLVED	12000	µg/L		
LEACHATE	11/17/2006	IRON, DISSOLVED	3800	µg/L		
LEACHATE	2/23/2007	IRON, DISSOLVED	11000	µg/L	Ej	
LEACHATE	5/22/2007	IRON, DISSOLVED	18000	µg/L	Ej	
LEACHATE	8/17/2007	IRON, DISSOLVED	19000	µg/L	Ej	
LEACHATE	11/12/2007	IRON, DISSOLVED	15000	µg/L		
LEACHATE	2/28/2008	IRON, DISSOLVED	10900	µg/L		
LEACHATE	5/30/2008	IRON, DISSOLVED	20600	µg/L		
LEACHATE	6/14/2002	IRON, TOTAL	32000	µg/L		15/15
LEACHATE	12/3/2003	IRON, TOTAL	59000	µg/L		
LEACHATE	3/4/2004	IRON, TOTAL	420000	µg/L		
LEACHATE	9/7/2004	IRON, TOTAL	86000	µg/L		
LEACHATE	12/8/2004	IRON, TOTAL	39000	µg/L		
LEACHATE	3/9/2005	IRON, TOTAL	26000	µg/L		
LEACHATE	9/14/2005	IRON, TOTAL	32000	µg/L		
LEACHATE	12/14/2005	IRON, TOTAL	47000	µg/L		
LEACHATE	3/9/2006	IRON, TOTAL	30000	µg/L		
LEACHATE	11/17/2006	IRON, TOTAL	6500	µg/L		
LEACHATE	2/23/2007	IRON, TOTAL	14000	µg/L	Ej	
LEACHATE	5/22/2007	IRON, TOTAL	21000	µg/L	Ej	
LEACHATE	11/12/2007	IRON, TOTAL	23000	µg/L		
LEACHATE	2/28/2008	IRON, TOTAL	14800	µg/L		
LEACHATE	5/30/2008	IRON, TOTAL	27800	µg/L		
LEACHATE	9/5/1997	LEAD, TOTAL	7	µg/L		27/82

Leachate Results - Detections Only
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WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	6/18/1998	LEAD, TOTAL	0.89	µg/L	Q	
LEACHATE	2/3/1999	LEAD, TOTAL	4.2	µg/L	Q	
LEACHATE	5/6/1999	LEAD, TOTAL	8.5	µg/L	Q	
LEACHATE	7/8/1999	LEAD, TOTAL	3.6	µg/L	Q	
LEACHATE	5/3/2000	LEAD, TOTAL	19	µg/L		
LEACHATE	6/15/2000	LEAD, TOTAL	4.2	µg/L		
LEACHATE	1/4/2001	LEAD, TOTAL	15	µg/L		
LEACHATE	3/1/2001	LEAD, TOTAL	7.9	µg/L	Q	
LEACHATE	9/5/2001	LEAD, TOTAL	4.9	µg/L		
LEACHATE	12/4/2001	LEAD, TOTAL	10	µg/L		
LEACHATE	3/6/2003	LEAD, TOTAL	3.3	µg/L	QA	
LEACHATE	6/13/2003	LEAD, TOTAL	0.92	µg/L	Q	
LEACHATE	9/3/2003	LEAD, TOTAL	5.3	µg/L		
LEACHATE	3/4/2004	LEAD, TOTAL	17	µg/L		
LEACHATE	6/3/2004	LEAD, TOTAL	0.79	µg/L		
LEACHATE	9/7/2004	LEAD, TOTAL	2.8	µg/L	A	
LEACHATE	12/8/2004	LEAD, TOTAL	0.4	µg/L	Q	
LEACHATE	3/9/2005	LEAD, TOTAL	0.85	µg/L	A	
LEACHATE	9/14/2005	LEAD, TOTAL	0.5	µg/L	Q	
LEACHATE	12/14/2005	LEAD, TOTAL	0.73	µg/L	Q	
LEACHATE	6/9/2006	LEAD, TOTAL	0.84	µg/L	Q	
LEACHATE	2/23/2007	LEAD, TOTAL	1.2	µg/L	Ej	
LEACHATE	8/17/2007	LEAD, TOTAL	0.61	µg/L	A	
LEACHATE	11/12/2007	LEAD, TOTAL	1.4	µg/L		
LEACHATE	2/28/2008	LEAD, TOTAL	1.8	µg/L		
LEACHATE	5/30/2008	LEAD, TOTAL	1.1	µg/L		
LEACHATE	9/5/1997	MERCURY, TOTAL	0.3	µg/L		6/82
LEACHATE	1/28/1998	MERCURY, TOTAL	0.09	µg/L	Q	
LEACHATE	12/2/1998	MERCURY, TOTAL	0.044	µg/L	Q	
LEACHATE	5/6/1999	MERCURY, TOTAL	0.051	µg/L	Q	
LEACHATE	8/2/2000	MERCURY, TOTAL	0.13	µg/L	A	
LEACHATE	1/4/2001	MERCURY, TOTAL	0.07	µg/L		
LEACHATE	6/18/1998	METHYLENE CHLORIDE	1.4	µg/L		4/11
LEACHATE	6/14/2001	METHYLENE CHLORIDE	2.5	µg/L		
LEACHATE	6/14/2002	METHYLENE CHLORIDE	1.5	µg/L		
LEACHATE	6/3/2004	METHYLENE CHLORIDE	0.71	µg/L	Q	
LEACHATE	4/3/1997	NICKEL, TOTAL	15	µg/L		76/82
LEACHATE	4/10/1997	NICKEL, TOTAL	18	µg/L		
LEACHATE	4/17/1997	NICKEL, TOTAL	12	µg/L		
LEACHATE	5/29/1997	NICKEL, TOTAL	15	µg/L		
LEACHATE	8/28/1997	NICKEL, TOTAL	12	µg/L		
LEACHATE	9/25/1997	NICKEL, TOTAL	40	µg/L		
LEACHATE	10/8/1997	NICKEL, TOTAL	23	µg/L		
LEACHATE	11/26/1997	NICKEL, TOTAL	12	µg/L	Q	
LEACHATE	12/10/1997	NICKEL, TOTAL	22	µg/L		
LEACHATE	1/28/1998	NICKEL, TOTAL	13	µg/L		
LEACHATE	2/25/1998	NICKEL, TOTAL	22	µg/L		
LEACHATE	4/16/1998	NICKEL, TOTAL	20	µg/L		
LEACHATE	5/14/1998	NICKEL, TOTAL	15	µg/L		
LEACHATE	6/18/1998	NICKEL, TOTAL	17	µg/L		
LEACHATE	7/9/1998	NICKEL, TOTAL	14	µg/L		
LEACHATE	8/13/1998	NICKEL, TOTAL	14	µg/L		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	10/8/1998	NICKEL, TOTAL	20	µg/L		
LEACHATE	11/6/1998	NICKEL, TOTAL	14	µg/L		
LEACHATE	12/2/1998	NICKEL, TOTAL	220	µg/L		
LEACHATE	1/6/1999	NICKEL, TOTAL	38	µg/L		
LEACHATE	2/3/1999	NICKEL, TOTAL	100	µg/L		
LEACHATE	3/9/1999	NICKEL, TOTAL	26	µg/L		
LEACHATE	4/7/1999	NICKEL, TOTAL	19	µg/L		
LEACHATE	5/6/1999	NICKEL, TOTAL	130	µg/L	Ej	
LEACHATE	6/17/1999	NICKEL, TOTAL	44	µg/L		
LEACHATE	7/8/1999	NICKEL, TOTAL	67	µg/L		
LEACHATE	8/12/1999	NICKEL, TOTAL	33	µg/L		
LEACHATE	9/8/1999	NICKEL, TOTAL	88	µg/L		
LEACHATE	10/14/1999	NICKEL, TOTAL	720	µg/L		
LEACHATE	11/4/1999	NICKEL, TOTAL	93	µg/L		
LEACHATE	12/1/1999	NICKEL, TOTAL	27	µg/L		
LEACHATE	1/5/2000	NICKEL, TOTAL	38	µg/L		
LEACHATE	2/3/2000	NICKEL, TOTAL	58	µg/L		
LEACHATE	3/1/2000	NICKEL, TOTAL	47	µg/L		
LEACHATE	4/4/2000	NICKEL, TOTAL	51	µg/L		
LEACHATE	5/3/2000	NICKEL, TOTAL	77	µg/L		
LEACHATE	6/15/2000	NICKEL, TOTAL	31	µg/L		
LEACHATE	7/5/2000	NICKEL, TOTAL	29	µg/L		
LEACHATE	8/2/2000	NICKEL, TOTAL	94	µg/L		
LEACHATE	9/7/2000	NICKEL, TOTAL	37	µg/L		
LEACHATE	10/4/2000	NICKEL, TOTAL	20	µg/L		
LEACHATE	11/2/2000	NICKEL, TOTAL	36	µg/L		
LEACHATE	12/6/2000	NICKEL, TOTAL	31	µg/L		
LEACHATE	1/4/2001	NICKEL, TOTAL	79	µg/L		
LEACHATE	2/1/2001	NICKEL, TOTAL	41	µg/L		
LEACHATE	3/1/2001	NICKEL, TOTAL	20	µg/L		
LEACHATE	4/3/2001	NICKEL, TOTAL	38	µg/L		
LEACHATE	5/2/2001	NICKEL, TOTAL	27	µg/L		
LEACHATE	6/14/2001	NICKEL, TOTAL	32	µg/L		
LEACHATE	9/5/2001	NICKEL, TOTAL	68	µg/L		
LEACHATE	12/4/2001	NICKEL, TOTAL	37	µg/L		
LEACHATE	3/1/2002	NICKEL, TOTAL	28	µg/L		
LEACHATE	6/14/2002	NICKEL, TOTAL	32	µg/L		
LEACHATE	9/3/2002	NICKEL, TOTAL	28	µg/L		
LEACHATE	12/4/2002	NICKEL, TOTAL	17	µg/L		
LEACHATE	3/6/2003	NICKEL, TOTAL	28	µg/L		
LEACHATE	6/13/2003	NICKEL, TOTAL	31	µg/L		
LEACHATE	9/3/2003	NICKEL, TOTAL	47	µg/L		
LEACHATE	12/3/2003	NICKEL, TOTAL	33	µg/L		
LEACHATE	3/4/2004	NICKEL, TOTAL	72	µg/L		
LEACHATE	6/3/2004	NICKEL, TOTAL	35	µg/L		
LEACHATE	9/7/2004	NICKEL, TOTAL	29	µg/L		
LEACHATE	12/8/2004	NICKEL, TOTAL	20	µg/L		
LEACHATE	3/9/2005	NICKEL, TOTAL	31	µg/L		
LEACHATE	6/14/2005	NICKEL, TOTAL	24	µg/L		
LEACHATE	9/14/2005	NICKEL, TOTAL	29	µg/L		
LEACHATE	12/14/2005	NICKEL, TOTAL	35	µg/L		
LEACHATE	3/9/2006	NICKEL, TOTAL	25	µg/L		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	6/9/2006	NICKEL, TOTAL	23	µg/L		
LEACHATE	11/17/2006	NICKEL, TOTAL	22	µg/L		
LEACHATE	2/23/2007	NICKEL, TOTAL	21	µg/L	XAj	
LEACHATE	5/22/2007	NICKEL, TOTAL	22	µg/L	Ej	
LEACHATE	8/17/2007	NICKEL, TOTAL	22	µg/L	Ej	
LEACHATE	11/12/2007	NICKEL, TOTAL	28	µg/L		
LEACHATE	2/28/2008	NICKEL, TOTAL	22	µg/L	SDj	
LEACHATE	5/30/2008	NICKEL, TOTAL	23.9	µg/L		71/71
LEACHATE	9/5/1997	PH, FIELD	7	SU		
LEACHATE	12/10/1997	PH, FIELD	7	SU		
LEACHATE	1/28/1998	PH, FIELD	6.72	SU		
LEACHATE	2/25/1998	PH, FIELD	6.71	SU		
LEACHATE	3/11/1998	PH, FIELD	6.68	SU		
LEACHATE	4/16/1998	PH, FIELD	6.6	SU		
LEACHATE	5/14/1998	PH, FIELD	6.6	SU		
LEACHATE	6/18/1998	PH, FIELD	6.7	SU		
LEACHATE	7/9/1998	PH, FIELD	6.7	SU		
LEACHATE	8/13/1998	PH, FIELD	6.65	SU		
LEACHATE	9/9/1998	PH, FIELD	6.6	SU		
LEACHATE	10/8/1998	PH, FIELD	6.83	SU		
LEACHATE	11/6/1998	PH, FIELD	6.73	SU		
LEACHATE	12/2/1998	PH, FIELD	6.58	SU		
LEACHATE	1/6/1999	PH, FIELD	6.65	SU		
LEACHATE	2/3/1999	PH, FIELD	6.69	SU		
LEACHATE	3/9/1999	PH, FIELD	6.72	SU		
LEACHATE	4/7/1999	PH, FIELD	6.74	SU		
LEACHATE	5/6/1999	PH, FIELD	6.69	SU		
LEACHATE	6/17/1999	PH, FIELD	6.64	SU		
LEACHATE	7/8/1999	PH, FIELD	6.74	SU		
LEACHATE	8/12/1999	PH, FIELD	6.55	SU		
LEACHATE	9/8/1999	PH, FIELD	6.74	SU		
LEACHATE	10/14/1999	PH, FIELD	6.66	SU		
LEACHATE	11/4/1999	PH, FIELD	6.72	SU		
LEACHATE	12/1/1999	PH, FIELD	6.63	SU		
LEACHATE	1/5/2000	PH, FIELD	6.78	SU		
LEACHATE	2/3/2000	PH, FIELD	6.78	SU		
LEACHATE	3/1/2000	PH, FIELD	6.66	SU		
LEACHATE	4/4/2000	PH, FIELD	6.8	SU		
LEACHATE	5/3/2000	PH, FIELD	6.75	SU		
LEACHATE	6/15/2000	PH, FIELD	6.74	SU		
LEACHATE	7/5/2000	PH, FIELD	6.68	SU		
LEACHATE	8/2/2000	PH, FIELD	6.58	SU		
LEACHATE	9/7/2000	PH, FIELD	6.63	SU		
LEACHATE	10/4/2000	PH, FIELD	6.63	SU		
LEACHATE	11/2/2000	PH, FIELD	6.56	SU		
LEACHATE	12/6/2000	PH, FIELD	6.69	SU		
LEACHATE	1/4/2001	PH, FIELD	6.84	SU		
LEACHATE	2/1/2001	PH, FIELD	6.9	SU		
LEACHATE	3/1/2001	PH, FIELD	6.81	SU		
LEACHATE	4/3/2001	PH, FIELD	6.79	SU		
LEACHATE	5/2/2001	PH, FIELD	6.86	SU		
LEACHATE	6/14/2001	PH, FIELD	6.76	SU		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	9/5/2001	PH, FIELD	6.86	SU		
LEACHATE	12/4/2001	PH, FIELD	6.88	SU		
LEACHATE	3/1/2002	PH, FIELD	6.70	SU		
LEACHATE	6/14/2002	PH, FIELD	6.64	SU		
LEACHATE	9/3/2002	PH, FIELD	6.66	SU		
LEACHATE	12/4/2002	PH, FIELD	7.46	SU		
LEACHATE	3/6/2003	PH, FIELD	6.65	SU		
LEACHATE	6/13/2003	PH, FIELD	6.74	SU		
LEACHATE	9/3/2003	PH, FIELD	6.62	SU		
LEACHATE	12/3/2003	PH, FIELD	6.64	SU		
LEACHATE	3/4/2004	PH, FIELD	6.64	SU		
LEACHATE	6/3/2004	PH, FIELD	6.76	SU		
LEACHATE	9/7/2004	PH, FIELD	6.78	SU		
LEACHATE	12/8/2004	PH, FIELD	6.7	SU		
LEACHATE	3/9/2005	PH, FIELD	6.84	SU		
LEACHATE	6/14/2005	PH, FIELD	6.78	SU		
LEACHATE	9/14/2005	PH, FIELD	6.8	SU		
LEACHATE	12/14/2005	PH, FIELD	6.82	SU		
LEACHATE	3/9/2006	PH, FIELD	6.84	SU		
LEACHATE	6/9/2006	PH, FIELD	6.82	SU		
LEACHATE	11/17/2006	PH, FIELD	6.68	SU		
LEACHATE	2/23/2007	PH, FIELD	6.74	SU		
LEACHATE	5/22/2007	PH, FIELD	6.84	SU		
LEACHATE	8/17/2007	PH, FIELD	6.79	SU		
LEACHATE	11/12/2007	PH, FIELD	6.74	SU		
LEACHATE	2/28/2008	PH, FIELD	6.65	SU		
LEACHATE	5/30/2008	PH, FIELD	6.65	SU		
LEACHATE	3/21/1997	PHOSPHORUS, TOTAL	0.07	mg/L	QPj	27/81
LEACHATE	4/3/1997	PHOSPHORUS, TOTAL	0.055	mg/L	Q	
LEACHATE	4/10/1997	PHOSPHORUS, TOTAL	0.093	mg/L	Q	
LEACHATE	4/17/1997	PHOSPHORUS, TOTAL	0.037	mg/L	Q	
LEACHATE	6/27/1997	PHOSPHORUS, TOTAL	0.14	mg/L	Q	
LEACHATE	9/5/1997	PHOSPHORUS, TOTAL	0.27	mg/L		
LEACHATE	12/10/1997	PHOSPHORUS, TOTAL	0.14	mg/L	Q	
LEACHATE	1/28/1998	PHOSPHORUS, TOTAL	0.13	mg/L	Q	
LEACHATE	4/16/1998	PHOSPHORUS, TOTAL	0.33	mg/L		
LEACHATE	8/13/1998	PHOSPHORUS, TOTAL	0.55	mg/L		
LEACHATE	12/2/1998	PHOSPHORUS, TOTAL	1.6	mg/L		
LEACHATE	1/6/1999	PHOSPHORUS, TOTAL	0.46	mg/L	Q	
LEACHATE	3/9/1999	PHOSPHORUS, TOTAL	0.57	mg/L	Q	
LEACHATE	5/6/1999	PHOSPHORUS, TOTAL	2.2	mg/L		
LEACHATE	7/8/1999	PHOSPHORUS, TOTAL	2	mg/L		
LEACHATE	9/8/1999	PHOSPHORUS, TOTAL	1.9	mg/L		
LEACHATE	10/14/1999	PHOSPHORUS, TOTAL	4.1	mg/L		
LEACHATE	11/4/1999	PHOSPHORUS, TOTAL	0.9	mg/L	Q	
LEACHATE	12/1/1999	PHOSPHORUS, TOTAL	3.4	mg/L		
LEACHATE	8/2/2000	PHOSPHORUS, TOTAL	0.46	mg/L	Q	
LEACHATE	11/2/2000	PHOSPHORUS, TOTAL	1.1	mg/L	A	
LEACHATE	12/6/2000	PHOSPHORUS, TOTAL	0.11	mg/L	Q	
LEACHATE	2/1/2001	PHOSPHORUS, TOTAL	0.91	mg/L	A	
LEACHATE	9/3/2003	PHOSPHORUS, TOTAL	0.17	mg/L	QA	
LEACHATE	3/4/2004	PHOSPHORUS, TOTAL	1	mg/L		
LEACHATE	6/18/2004	PHOSPHORUS, TOTAL	0.63	mg/L	QN	
LEACHATE	9/7/2004	PHOSPHORUS, TOTAL	0.27	mg/L	Q	

Leachate Results - Detections Only
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WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	6/3/2004	SELENIUM, TOTAL	8.7	µg/L		4/11
LEACHATE	6/14/2005	SELENIUM, TOTAL	3.2	µg/L		
LEACHATE	6/9/2006	SELENIUM, TOTAL	4.8	µg/L	Q	
LEACHATE	8/17/2007	SELENIUM, TOTAL	2.2	µg/L		
LEACHATE	3/9/2005	SILVER, TOTAL	0.28	µg/L		3/82
LEACHATE	9/14/2005	SILVER, TOTAL	0.33	µg/L	Q	
LEACHATE	3/9/2006	SILVER, TOTAL	0.55	µg/L	QA	
LEACHATE	3/21/1997	SOLIDS, TOTAL SUSPENDED	59	mg/L		82/82
LEACHATE	4/3/1997	SOLIDS, TOTAL SUSPENDED	36	mg/L		
LEACHATE	4/10/1997	SOLIDS, TOTAL SUSPENDED	20	mg/L		
LEACHATE	4/17/1997	SOLIDS, TOTAL SUSPENDED	63	mg/L		
LEACHATE	5/29/1997	SOLIDS, TOTAL SUSPENDED	53	mg/L		
LEACHATE	6/27/1997	SOLIDS, TOTAL SUSPENDED	51	mg/L		
LEACHATE	7/24/1997	SOLIDS, TOTAL SUSPENDED	29	mg/L		
LEACHATE	8/28/1997	SOLIDS, TOTAL SUSPENDED	14	mg/L		
LEACHATE	9/5/1997	SOLIDS, TOTAL SUSPENDED	119	mg/L		
LEACHATE	9/25/1997	SOLIDS, TOTAL SUSPENDED	260	mg/L		
LEACHATE	10/8/1997	SOLIDS, TOTAL SUSPENDED	80	mg/L		
LEACHATE	11/26/1997	SOLIDS, TOTAL SUSPENDED	29	mg/L		
LEACHATE	12/10/1997	SOLIDS, TOTAL SUSPENDED	58	mg/L		
LEACHATE	1/28/1998	SOLIDS, TOTAL SUSPENDED	12	mg/L		
LEACHATE	2/25/1998	SOLIDS, TOTAL SUSPENDED	70	mg/L		
LEACHATE	3/11/1998	SOLIDS, TOTAL SUSPENDED	45	mg/L		
LEACHATE	4/16/1998	SOLIDS, TOTAL SUSPENDED	56	mg/L		
LEACHATE	5/14/1998	SOLIDS, TOTAL SUSPENDED	250	mg/L		
LEACHATE	6/18/1998	SOLIDS, TOTAL SUSPENDED	120	mg/L		
LEACHATE	7/9/1998	SOLIDS, TOTAL SUSPENDED	55	mg/L		
LEACHATE	8/13/1998	SOLIDS, TOTAL SUSPENDED	26	mg/L		
LEACHATE	9/9/1998	SOLIDS, TOTAL SUSPENDED	30	mg/L		
LEACHATE	10/8/1998	SOLIDS, TOTAL SUSPENDED	69	mg/L		
LEACHATE	11/6/1998	SOLIDS, TOTAL SUSPENDED	35	mg/L		
LEACHATE	12/2/1998	SOLIDS, TOTAL SUSPENDED	3100	mg/L		
LEACHATE	1/6/1999	SOLIDS, TOTAL SUSPENDED	260	mg/L		
LEACHATE	2/3/1999	SOLIDS, TOTAL SUSPENDED	120	mg/L		
LEACHATE	3/9/1999	SOLIDS, TOTAL SUSPENDED	19	mg/L	Q	
LEACHATE	4/7/1999	SOLIDS, TOTAL SUSPENDED	29	mg/L		
LEACHATE	5/6/1999	SOLIDS, TOTAL SUSPENDED	9600	mg/L		
LEACHATE	6/17/1999	SOLIDS, TOTAL SUSPENDED	79	mg/L		
LEACHATE	7/8/1999	SOLIDS, TOTAL SUSPENDED	360	mg/L		
LEACHATE	8/12/1999	SOLIDS, TOTAL SUSPENDED	10	mg/L	Q	
LEACHATE	9/8/1999	SOLIDS, TOTAL SUSPENDED	21000	mg/L		
LEACHATE	10/14/1999	SOLIDS, TOTAL SUSPENDED	300	mg/L		
LEACHATE	11/4/1999	SOLIDS, TOTAL SUSPENDED	700	mg/L		
LEACHATE	12/1/1999	SOLIDS, TOTAL SUSPENDED	1700	mg/L		
LEACHATE	1/5/2000	SOLIDS, TOTAL SUSPENDED	110	mg/L		
LEACHATE	2/3/2000	SOLIDS, TOTAL SUSPENDED	89	mg/L		
LEACHATE	3/1/2000	SOLIDS, TOTAL SUSPENDED	130	mg/L		
LEACHATE	4/4/2000	SOLIDS, TOTAL SUSPENDED	230	mg/L		
LEACHATE	5/3/2000	SOLIDS, TOTAL SUSPENDED	4000	mg/L		
LEACHATE	6/15/2000	SOLIDS, TOTAL SUSPENDED	250	mg/L		

Leachate Results - Detections Only
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WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	7/5/2000	SOLIDS, TOTAL SUSPENDED	240	mg/L		
LEACHATE	8/2/2000	SOLIDS, TOTAL SUSPENDED	3200	mg/L		
LEACHATE	9/7/2000	SOLIDS, TOTAL SUSPENDED	990	mg/L		
LEACHATE	10/4/2000	SOLIDS, TOTAL SUSPENDED	400	mg/L		
LEACHATE	11/2/2000	SOLIDS, TOTAL SUSPENDED	2000	mg/L		
LEACHATE	12/6/2000	SOLIDS, TOTAL SUSPENDED	320	mg/L		
LEACHATE	1/4/2001	SOLIDS, TOTAL SUSPENDED	130	mg/L		
LEACHATE	2/1/2001	SOLIDS, TOTAL SUSPENDED	2000	mg/L		
LEACHATE	3/1/2001	SOLIDS, TOTAL SUSPENDED	50	mg/L		
LEACHATE	4/3/2001	SOLIDS, TOTAL SUSPENDED	610	mg/L		
LEACHATE	5/2/2001	SOLIDS, TOTAL SUSPENDED	100	mg/L		
LEACHATE	6/14/2001	SOLIDS, TOTAL SUSPENDED	110	mg/L		
LEACHATE	9/5/2001	SOLIDS, TOTAL SUSPENDED	990	mg/L		
LEACHATE	12/4/2001	SOLIDS, TOTAL SUSPENDED	430	mg/L		
LEACHATE	3/1/2002	SOLIDS, TOTAL SUSPENDED	70	mg/L		
LEACHATE	6/14/2002	SOLIDS, TOTAL SUSPENDED	120	mg/L		
LEACHATE	9/3/2002	SOLIDS, TOTAL SUSPENDED	690	mg/L		
LEACHATE	12/4/2002	SOLIDS, TOTAL SUSPENDED	5.1	mg/L		
LEACHATE	3/6/2003	SOLIDS, TOTAL SUSPENDED	49	mg/L		
LEACHATE	6/13/2003	SOLIDS, TOTAL SUSPENDED	320	mg/L		
LEACHATE	9/3/2003	SOLIDS, TOTAL SUSPENDED	850	mg/L		
LEACHATE	12/3/2003	SOLIDS, TOTAL SUSPENDED	130	mg/L		
LEACHATE	3/4/2004	SOLIDS, TOTAL SUSPENDED	1000	mg/L		
LEACHATE	6/3/2004	SOLIDS, TOTAL SUSPENDED	230	mg/L		
LEACHATE	9/7/2004	SOLIDS, TOTAL SUSPENDED	180	mg/L		
LEACHATE	12/8/2004	SOLIDS, TOTAL SUSPENDED	93	mg/L		
LEACHATE	3/9/2005	SOLIDS, TOTAL SUSPENDED	51	mg/L		
LEACHATE	6/14/2005	SOLIDS, TOTAL SUSPENDED	71	mg/L		
LEACHATE	9/14/2005	SOLIDS, TOTAL SUSPENDED	82	mg/L		
LEACHATE	12/14/2005	SOLIDS, TOTAL SUSPENDED	130	mg/L		
LEACHATE	3/9/2006	SOLIDS, TOTAL SUSPENDED	72	mg/L		
LEACHATE	6/9/2006	SOLIDS, TOTAL SUSPENDED	36	mg/L		
LEACHATE	11/17/2006	SOLIDS, TOTAL SUSPENDED	29	mg/L		
LEACHATE	2/23/2007	SOLIDS, TOTAL SUSPENDED	41	mg/L		
LEACHATE	5/22/2007	SOLIDS, TOTAL SUSPENDED	51	mg/L	&j	
LEACHATE	8/17/2007	SOLIDS, TOTAL SUSPENDED	120	mg/L		
LEACHATE	11/12/2007	SOLIDS, TOTAL SUSPENDED	63	mg/L		
LEACHATE	2/28/2008	SOLIDS, TOTAL SUSPENDED	41	mg/L		
LEACHATE	5/30/2008	SOLIDS, TOTAL SUSPENDED	59.4	mg/L		
LEACHATE	9/25/1997	TOLUENE	2.8	µg/L		6/11
LEACHATE	6/18/1998	TOLUENE	12	µg/L		
LEACHATE	6/17/1999	TOLUENE	0.57	µg/L	Q	
LEACHATE	6/15/2000	TOLUENE	1.4	µg/L		
LEACHATE	6/14/2001	TOLUENE	1.4	µg/L		
LEACHATE	6/14/2002	TOLUENE	3.5	µg/L		
LEACHATE	6/3/2004	VINYL CHLORIDE	0.83	µg/L		2/11
LEACHATE	8/17/2007	VINYL CHLORIDE	2.4	µg/L		
LEACHATE	3/21/1997	ZINC, TOTAL	83	µg/L		64/82
LEACHATE	4/3/1997	ZINC, TOTAL	17	µg/L		
LEACHATE	4/10/1997	ZINC, TOTAL	63	µg/L		
LEACHATE	4/17/1997	ZINC, TOTAL	15	µg/L		
LEACHATE	5/29/1997	ZINC, TOTAL	16	µg/L		

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WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	6/27/1997	ZINC, TOTAL	6.5	µg/L		
LEACHATE	7/24/1997	ZINC, TOTAL	38	µg/L		
LEACHATE	8/28/1997	ZINC, TOTAL	13	µg/L		
LEACHATE	9/5/1997	ZINC, TOTAL	132	µg/L		
LEACHATE	9/25/1997	ZINC, TOTAL	22	µg/L		
LEACHATE	10/8/1997	ZINC, TOTAL	26	µg/L		
LEACHATE	11/26/1997	ZINC, TOTAL	8.2	µg/L	Q	
LEACHATE	12/10/1997	ZINC, TOTAL	19	µg/L		
LEACHATE	1/28/1998	ZINC, TOTAL	18	µg/L		
LEACHATE	4/16/1998	ZINC, TOTAL	4.1	µg/L	Q	
LEACHATE	5/14/1998	ZINC, TOTAL	14	µg/L		
LEACHATE	6/18/1998	ZINC, TOTAL	25	µg/L		
LEACHATE	8/13/1998	ZINC, TOTAL	4.6	µg/L	Q	
LEACHATE	9/9/1998	ZINC, TOTAL	10	µg/L	Q	
LEACHATE	10/8/1998	ZINC, TOTAL	22	µg/L		
LEACHATE	11/6/1998	ZINC, TOTAL	9.3	µg/L	Q	
LEACHATE	12/2/1998	ZINC, TOTAL	190	µg/L	*j	
LEACHATE	1/6/1999	ZINC, TOTAL	15	µg/L	B	
LEACHATE	2/3/1999	ZINC, TOTAL	47	µg/L		
LEACHATE	3/9/1999	ZINC, TOTAL	10	µg/L	Q	
LEACHATE	4/7/1999	ZINC, TOTAL	17	µg/L		
LEACHATE	5/6/1999	ZINC, TOTAL	100	µg/L	Ej	
LEACHATE	6/17/1999	ZINC, TOTAL	46	µg/L		
LEACHATE	7/8/1999	ZINC, TOTAL	110	µg/L		
LEACHATE	9/8/1999	ZINC, TOTAL	140	µg/L		
LEACHATE	10/14/1999	ZINC, TOTAL	390	µg/L	N	
LEACHATE	11/4/1999	ZINC, TOTAL	250	µg/L		
LEACHATE	12/1/1999	ZINC, TOTAL	26	µg/L	A	
LEACHATE	2/3/2000	ZINC, TOTAL	200	µg/L		
LEACHATE	3/1/2000	ZINC, TOTAL	120	µg/L		
LEACHATE	4/4/2000	ZINC, TOTAL	45	µg/L		
LEACHATE	5/3/2000	ZINC, TOTAL	120	µg/L		
LEACHATE	6/15/2000	ZINC, TOTAL	38	µg/L		
LEACHATE	7/5/2000	ZINC, TOTAL	17	µg/L	Q	
LEACHATE	8/2/2000	ZINC, TOTAL	140	µg/L		
LEACHATE	9/7/2000	ZINC, TOTAL	37	µg/L	QED	
LEACHATE	10/4/2000	ZINC, TOTAL	11	µg/L	Q	
LEACHATE	11/2/2000	ZINC, TOTAL	25	µg/L		
LEACHATE	1/4/2001	ZINC, TOTAL	110	µg/L	A	
LEACHATE	2/1/2001	ZINC, TOTAL	45	µg/L		
LEACHATE	3/1/2001	ZINC, TOTAL	32	µg/L		
LEACHATE	9/5/2001	ZINC, TOTAL	100	µg/L		
LEACHATE	12/4/2001	ZINC, TOTAL	32	µg/L		
LEACHATE	3/1/2002	ZINC, TOTAL	16	µg/L	Q	
LEACHATE	6/14/2002	ZINC, TOTAL	16	µg/L	Q	
LEACHATE	9/3/2002	ZINC, TOTAL	16	µg/L		
LEACHATE	12/4/2002	ZINC, TOTAL	23	µg/L	Ej	
LEACHATE	6/13/2003	ZINC, TOTAL	19	µg/L		
LEACHATE	9/3/2003	ZINC, TOTAL	35	µg/L		
LEACHATE	12/3/2003	ZINC, TOTAL	46	µg/L		
LEACHATE	3/4/2004	ZINC, TOTAL	100	µg/L	Ej	
LEACHATE	6/3/2004	ZINC, TOTAL	19	µg/L		

Leachate Results - Detections Only
Lemberger Landfill

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS	DETECTION FREQUENCY
LEACHATE	9/7/2004	ZINC, TOTAL	36	µg/L	Q	
LEACHATE	12/8/2004	ZINC, TOTAL	17	µg/L		
LEACHATE	3/9/2005	ZINC, TOTAL	12	µg/L		
LEACHATE	12/14/2005	ZINC, TOTAL	7.4	µg/L	Q	
LEACHATE	3/9/2006	ZINC, TOTAL	14	µg/L		
LEACHATE	2/23/2007	ZINC, TOTAL	6.3	µg/L		
LEACHATE	5/30/2008	ZINC, TOTAL	7.4	µg/L		

Appendix C
Tabular Summary of
Landfill Gas Monitoring Results

**GAS MONITORING PROGRAM
SAMPLING DATA SHEET
LL/LTR SITES**

Date: 11-14-2007

Sampler(s): Mark Brooks

Gas Vent #	Time	Velocity ft/min	Methane (% Gas)	Methane (% LEL)	Oxygen (% O ₂)	Carbon Dioxide (% CO ₂)	Barometric Pressure		Non-meth. VOCs (PID, ppm)
							(in Hg)	Trend	
GV-1	1105	0	0	0	20.4	0	30.15	STEADY	0
GV-2	1203	0	0	0	20	0	30.15	STEADY	0
GV-3	1152	0	0	0	20.4	0	30.15	STEADY	0
GV-4	957	0	0	0	20.4	0	30.15	STEADY	0
GV-5	1126	0	0	0	20.2	0	30.15	STEADY	0
GV-6	1057	0	0	0	20	0	30.15	STEADY	0
GV-7	1112	0	0	0	20	0	30.15	STEADY	0
GV-8	1120	0	0	0	20	0	30.15	STEADY	0
GV-9	1145	0	0	0	20.4	0	30.15	STEADY	0
GV-10	1137	0	0	0	20.2	0	30.15	STEADY	0
GV-11	957	0	0	0	20.2	0	30.15	STEADY	0
GV-12	1047	0	0	0	20.2	0	30.15	STEADY	0
GV-13	1222	0	0	0	20	0	30.15	STEADY	0
GV-14	1215	0	0	0	20	0	30.15	STEADY	0
GV-15	940	0	0	0	20	0	30.15	STEADY	0
GV-16	1207	0	0	0	20.2	0	30.15	STEADY	0
GV-17	1038	0	0	0	20.2	0	30.15	STEADY	0
GV-18	1238	0	0	0	20	0	30.15	STEADY	0
GV-19	1229	0	0	0	20.4	0	30.15	STEADY	0
GV-20	931	0	0	0	20	0	30.15	STEADY	0
GV-21	1245	0	0	0	20	0	30.15	STEADY	0
GV-22	1030	0	0	0	20	0	30.15	STEADY	0

GAS MONITORING PROGRAM
SAMPLING DATA SHEET
LL/LTR SITES

Date: 11-14-2007

Sampler(s): Mark Brooks

Gas Vent #	Time	Velocity ft/min	Methane (% Gas)	Methane (% LEL)	Oxygen (% O2)	Carbon Dioxide (% CO2)	Barometric Pressure		Non-meth. VOCs (PID, ppm)
							(in Hg)	Trend	
GV-23	1305	0	0	0	20.2	0	30.15	STEADY	0
GV-24	1300	0	0	0	20.2	0	30.15	STEADY	0
GV-25	925	0	0	0	20.4	0	30.15	STEADY	0
GV-26	1342	0	0	0	20.4	0	30.15	STEADY	0
GV-27	1021	0	0	0	20.4	0	30.15	STEADY	0
GV-28	1351	0	0	0	20.4	0	30.15	STEADY	0
GV-29	1250	0	0	0	20.2	0	30.15	STEADY	0
GV-30	1245	0	0	0	20	0	30.15	STEADY	0
GV-31	910	0	0	0	20.2	0	30.15	STEADY	0
GV-32	1331	0	0	0	20.2	0	30.15	STEADY	0
GV-33	1012	0	0	0	20.2	0	30.15	STEADY	0
GV-34	1310	0	0	0	20.2	0	30.15	STEADY	0
GV-35	1003	0	0	0	20.2	0	30.15	STEADY	0
GV-36	1321	0	0	0	20.2	0	30.15	STEADY	0
GP-1	821	0	0	0	19.4	0	30.15	STEADY	0
GP-2	834	0	0	0	19.4	0	30.15	STEADY	0
GP-3	850	0	0	0	19.6	0	30.15	STEADY	0
GP-4	750	0	0	0	19	0	30.15	STEADY	0
GP-5	757	0	0	0	19.4	0	30.15	STEADY	0
GP-6	810	0	0	0	19.2	0	30.15	STEADY	0
GW-2	NR	NR	NR	NR	NR	NR	NR	NR	NR
GW-3	NR	NR	NR	NR	NR	NR	NR	NR	NR

**GAS MONITORING PROGRAM
SAMPLING DATA SHEET
LL/LTP SITES**

Date: 11-14-2007

Sampler(s): Mark Brooks

Gas Vent #	Time	Velocity ft/min	Methane (% Gas)	Methane (% LEL)	Oxygen (% O2)	Carbon Dioxide (% CO2)	Barometric Pressure		Non-meth. VOCs (PID, ppm)
							(in Hg)	Trend	
GW-6	NR	NR	NR	NR	NR	NR	NR	NR	NR
GW-7	NR	NR	NR	NR	NR	NR	NR	NR	NR
GW-8	NR	NR	NR	NR	NR	NR	NR	NR	NR
GW-9	NR	NR	NR	NR	NR	NR	NR	NR	NR

Instrument(s) used (brand, model): Landtec GA-90 Gas Analyzer, DA 4000 Digital Anemometer,
580 OVM/Datalogger, MINIGAS Multi Purpose Gas Monitor

Calibration gases and their concentrations: Zero Air, Carbon Dioxide 15%, & Methane 15%

ADDITIONAL COMMENTS:

Gas vents (GVs) and gas probes (GPs) are located at the LTR. Gas wells (GWs) are located at the LL.

NR = No reading taken. (Gas monitoring at the LL has been completed, per the approved O&M Plan.)

Appendix D
Tabular Summary of
Treated Effluent Quality – Detections Only -
July 2007 Through June 2008

Analytical Results - Detections Only (July 2007 - June 2008)
Lemberger Landfill - Effluent

WELL ID	DATE	PARAMETER	RESULT	UNITS	QUALIFIERS
EFFLUENT	8/17/2007	ALUMINUM, TOTAL	13	µg/L	Q
EFFLUENT	5/30/2008	ARSENIC, TOTAL	0.29	µg/L	
EFFLUENT	8/17/2007	CHLORIDE	14	mg/L	
EFFLUENT	8/17/2007	CHLOROMETHANE	0.29	µg/L	Q
EFFLUENT	8/17/2007	CHROMIUM, TOTAL	0.82	µg/L	Q
EFFLUENT	2/28/2008	CHROMIUM, TOTAL	4.4	µg/L	
EFFLUENT	8/17/2007	CONDUCTANCE, SPECIFIC	673	µmhos/cm	
EFFLUENT	11/12/2007	CONDUCTANCE, SPECIFIC	691	µmhos/cm	
EFFLUENT	2/28/2008	CONDUCTANCE, SPECIFIC	700	µmhos/cm	
EFFLUENT	5/30/2008	CONDUCTANCE, SPECIFIC	707	µmhos/cm	
EFFLUENT	8/17/2007	COPPER, TOTAL	3.2	µg/L	
EFFLUENT	11/12/2007	COPPER, TOTAL	1.5	µg/L	
EFFLUENT	2/28/2008	COPPER, TOTAL	1.6	µg/L	
EFFLUENT	5/30/2008	COPPER, TOTAL	5.8	µg/L	
EFFLUENT	2/28/2008	CYANIDE, TOTAL	0.0067	mg/L	J
EFFLUENT	8/17/2007	HARDNESS AS CaCO3, TOTAL	380	mg/L	
EFFLUENT	8/17/2007	IRON, TOTAL	240	µg/L	A
EFFLUENT	2/28/2008	IRON, TOTAL	152	µg/L	
EFFLUENT	8/17/2007	NICKEL, TOTAL	0.91	µg/L	A
EFFLUENT	2/28/2008	NICKEL, TOTAL	1.6	µg/L	
EFFLUENT	5/30/2008	NICKEL, TOTAL	0.56	µg/L	
EFFLUENT	8/17/2007	PH, FIELD	8.46	SU	
EFFLUENT	11/12/2007	PH, FIELD	8.4	SU	
EFFLUENT	2/28/2008	PH, FIELD	8.24	SU	
EFFLUENT	5/30/2008	PH, FIELD	8.17	SU	
EFFLUENT	5/30/2008	SELENIUM, TOTAL	0.34	µg/L	J
EFFLUENT	8/17/2007	SOLIDS, TOTAL SUSPENDED	0.43	mg/L	Q
EFFLUENT	11/12/2007	SOLIDS, TOTAL SUSPENDED	0.5	mg/L	Q
EFFLUENT	8/17/2007	TEMPERATURE	13	Deg C	
EFFLUENT	11/12/2007	TEMPERATURE	11	Deg C	
EFFLUENT	2/28/2008	TEMPERATURE	6.5	Deg C	
EFFLUENT	5/30/2008	TEMPERATURE	10	Deg C	

Attachment 1
Computer Disk With All Historical Monitoring
Data for Appendices A Through D
